

Florida

Out Of The Way Bass
The Chain Pickerel

*Fishing • Hunting
• Conservation •
Outdoor Recreation*

WILDLIFE

APRIL 1967

The Florida Magazine for all Sportsmen

25 CENTS



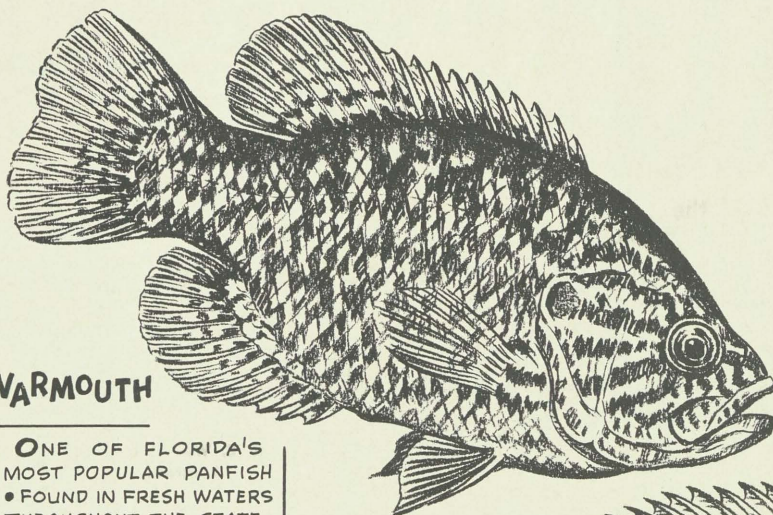
Florida Wildlife Scrapbook

BREAM TRIO

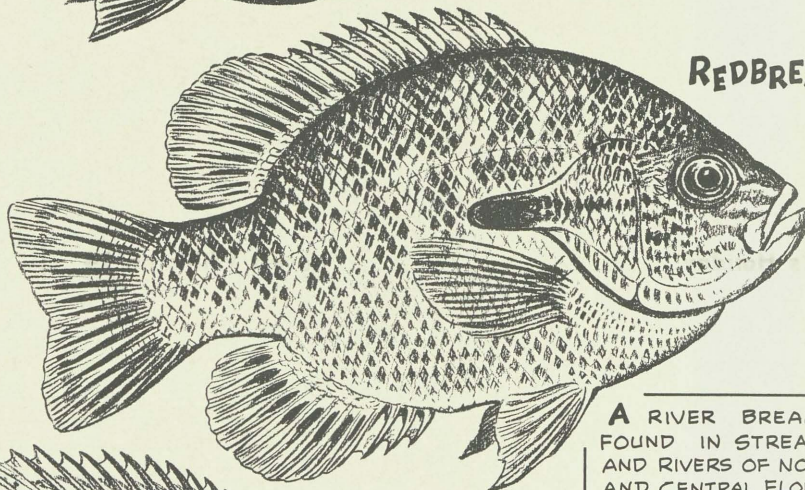
LESSER KNOWN
COUSINS OF THE
BASS AND BLUEGILL
• MEMBERS OF THE
SUNFISH FAMILY
CENTRACHIDAE

WARMOUTH

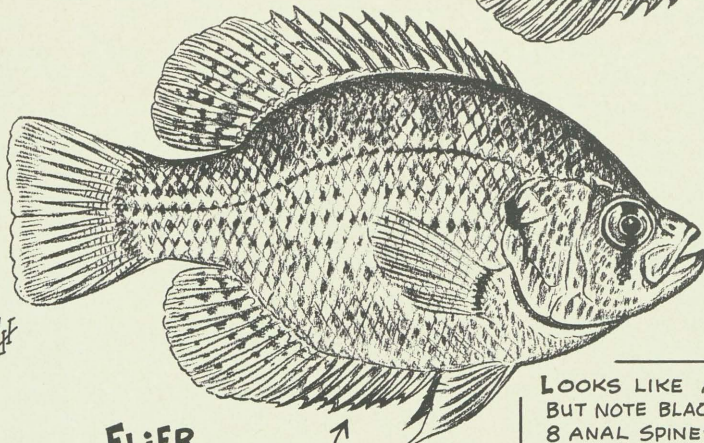
ONE OF FLORIDA'S
MOST POPULAR PANFISH
• FOUND IN FRESH WATERS
THROUGHOUT THE STATE
— PARTICULARLY SWAMP
SHORE LAKES • HAS A
LARGE MOUTH & DISTINCTIVE
BARRED FACIAL MARKINGS
• COLOR— DARK GREENISH
OR YELLOWISH—BROWN,
MOTTLED WITH DARK BROWN
• MAY APPEAR ALMOST
BLACK IN SOME WATERS
• SIZE TO 10 INCHES LONG
• WEIGHT TO 1 POUND



REDBREAST



A RIVER BREAM—
FOUND IN STREAMS
AND RIVERS OF NORTH
AND CENTRAL FLORIDA
• VERY COLORFUL—OLIVE
OR GRAYISH BROWN ABOVE
WITH BRIGHT ORANGE
OR RED BREAST • EYES
RED • BLUE STRIPES ON
FACE • LONG BLACK
OPERCLE OR EAR FLAP
• LENGTH TO 9 INCHES
• TOP WEIGHT LESS
THAN A POUND



FLIER

↑
ANAL
SPINES

LOOKS LIKE A SMALL SPECKLED PERCH—
BUT NOTE BLACK BAR THRU EYE AND 7 OR
8 ANAL SPINES COMPARED TO THE 5 OR 6 OF
THE SPECKLED PERCH • FOUND IN LAKES AND
STREAMS OF NORTH AND CENTRAL FLORIDA •
COLOR BRASSY GREENISH OR YELLOWISH • SIZE
TO 7 INCHES LONG • WEIGHT TO 12 OUNCES

Florida WILDLIFE

APRIL 1967

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State of Florida

★

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The Cover

With the spring-time fishing season well underway, Florida fresh water anglers can join "the gang" on well-known popular fishing waters, or seek "out of the way" angling sites for fun and relaxation. See page 22.

Cover Photo From Florida State News Bureau

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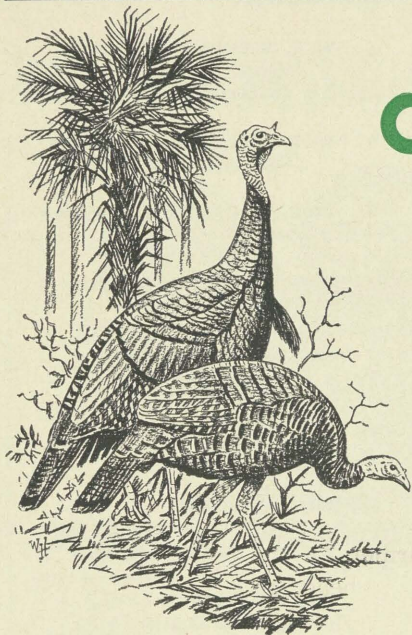
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CONSERVATION SCENE

More Fawns Survive Following Screwworm Eradication Program

FAWN CROPS of white-tailed deer have increased sharply in the southern United States as the result of a joint U. S. Department of Agriculture and State campaign that eradicated the screwworm fly, a serious pest of livestock and wildlife.

Wildlife biologists estimate that before the screwworm was wiped out in Texas, for instance, it killed up to 80 percent of the annual fawn crop in the heavily infested screwworm areas. Today, many ranges are carrying twice as many whitetails as they did before the screwworm eradication program began in that State in 1962.

A pest since pioneer days, the screwworm in modern times has cost the livestock industry as much as \$100 million a year. The fly lays its eggs only in the wounds of warm-blooded animals—in the navels of the newborn or in thorn scratches, tick bites, or wire or grass cuts. The many larvae which hatch from these eggs tear away at flesh, and literally eat the victim alive, often killing wildlife and untreated livestock. The screwworm's wildlife victims include the jackrabbit, peccary, raccoon, opossum, and bear, as well as deer.

To eradicate the pest, entomol-

ogists of USDA's Agricultural Research Service developed the technique employed by the Department and the cooperating livestock industry. The method combines atomic energy with knowledge of a vulnerable point in the screwworm's life cycle: female screwworms usually mate only once. Radioactive cobalt was used to sexually sterilize millions of flies reared weekly in "fly factories." Massive numbers of these sterilized flies were regularly air-dropped over thousands of square miles in 1958 and 1959 in the Southeast. When sterile males mated with native females, their eggs failed to hatch, pushing down screwworm populations until the pest was eradicated. Since the Southeast is isolated from other screwworm areas, it has remained free of the pest. A similar program has eradicated screwworms from the Southwest. The sterile-fly release program is being maintained along the U.S.-Mexico border, however, to prevent screwworms from flying in from infested areas in Mex-

ico and reestablishing themselves here.

In Florida, the USDA-State screwworm eradication was called "the best thing that ever happened to our deer" by H. E. Wallace, assistant director of the Game and Fresh Water Fish Commission. Deer numbers, now pegged at 160,000, have grown over 60 percent since 1958, when the Florida campaign began. Phenomenal increases have occurred on the State's wildlife game management areas, where careful long-term studies are made. On the 275,000-acre Fisheating Creek area, for example, the 1958 census showed only 100 deer. Now there are 1,000. The area was opened to hunters for the first time in 1964.

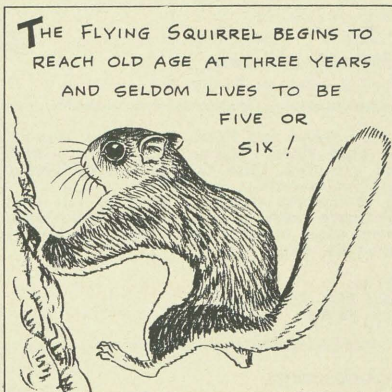
Eagle Destruction Reward

AT A RECENT meeting, the Board of Directors of the Florida Audubon Society voted to offer a reward of \$100 for information leading to the arrest and conviction of anyone killing or injuring a Bald Eagle in Florida. Despite the fact that Bald Eagles are protected by both Federal and State laws in Florida, this fine bird, national emblem of the United States, is headed for extinction unless drastic measures are adopted everywhere for its protection.

"We have all too frequent calls regarding Eagles that have been injured because of ignorant or thoughtless persecution by irresponsible gunners," according to C. Russell Mason, executive di-

(Continued on page 32)

Nature Notes



New World of Nature

Cave Book Published

THE LIFE OF THE CAVE, the fourth volume in the series titled "Our Living World of Nature," has just been published by McGraw-Hill. This volume describes the bizarre creatures that inhabit North American caves, emphasizing especially the life of the caves preserved in our National Parks and Forests.

The authors, Charles E. Mohr and Thomas L. Poulson, explain how the strange forms of cave life survive and flourish in a silent world of perpetual night, and how cave animals have evolved unusual physical and behavioral attributes that make them prisoners of their own macabre world and forever prevent them from returning to the world of light.

THE LIFE OF THE CAVE (\$4.95) contains the largest collection of illustrations on cave life ever assembled between the covers of one book. There are 110 true-color photographs, and 50 duotone and black-and-white photographs showing astonishing rock formations of great beauty and variety, rare reptiles and crustaceans, insects and fish, and astonishingly primitive forms of animal life. No text page is without an illustration; few are without color photographs or artwork.

Among the many topics discussed are how built-in "biological clocks" synchronize the behavior of cave inhabitants with seasonal changes aboveground, how these inhabitants "import" their food from the outside world, how bats and pack rats navigate in total darkness, which surface animals are potential cave-dwellers, and how an abundance of food could kill cave animals. ●

MOVING?

If you are planning to move, please send notification four weeks before changing address. Send your address label from a current issue, plus your NEW address. This will ensure continued subscription service.

Continued Disappearance

Birds of Prey

By ERNEST SWIFT

National Wildlife Federation

A FARMER ONCE TOLD ME that he could identify all species of hawks. "The marsh hawk," he stated, "that one with the white band on his tail, hunts field mice and gophers. All the rest are chicken hawks, and I shoot them."

He was at least observant of the habits of one species of hawk, which he felt was working in his interests; the others had no obvious value, so quite naturally they were bad.

The above emphasizes the difference between the general public attitude and the naturalist or scientist. Backed by old wives tales and a selfish interest, farmers, hunters, fishermen and so forth research off the top of their head. The single purpose interest is difficult to argue against when lodged in a single purpose mind.

With the increase of pesticides and poisons there has been an accelerated interest in just what is happening to the winged predators—so-called—and in 1966 the North Central Audubon Council conducted a study of the Osprey in the states of Michigan, Minnesota and Wisconsin.

In an opening statement their report says: "Many of the birds of prey are on the decline in North America. The Peregrine Falcon has virtually disappeared from the Eastern United States during the breeding season. The Bald Eagle population has been decreasing for the past decade. The Red-Shouldered Hawk has been declining in several states. The Red-Tailed Hawk population has decreased as much as 70% in some areas. The Osprey numbers have dwindled very rapidly in the Northeastern states in the last 10-15 years. One of the main reasons for this decline of our birds of prey is the fact that very few of the young are raised each year. The reason is still a mystery."

The reasons apparently contributing to the decline are: poisons in the fish that kill the birds or make their eggs infertile; water pollution and subsequent lack of suitable food fish in waters near nesting sites; decline of suitable nesting areas; animal or bird predation; and shooting, sometimes by well-intentioned persons who think they are protecting other animals.

It was further stated that in the midwest no study on correlation of insecticides and the Osprey decline had been made.

In one state where the Conservation Department had found large amounts of D.D.T. in fish in certain lakes, the nesting success of Osprey around those lakes was poor. But the scientists do not feel this conclusive; more study is needed. No doubt the scientists are right, but when so many "practical conservationists" are so positive in one direction, a little more dynamic emphasis in the other would not hurt, so as to counterbalance.

To the unscientific mind one factor shows up in the report. Of 237 Osprey nests located, 148 of them were active. The increase averaged out .37 young per nest. In regions where Osprey were more prosperous the clutch will be 3 eggs. In other words, instead of 55 young from 148 nests the number should approach 500. And if there are 500 nests, which in all likelihood the region

(Continued on page 34)



The steady increase in boat ramp construction opens many "new" angling areas, and may also enable some transfer of unwanted plantlife, according to fish management research.

WORKING ON A let-them-come-to-us basis, fisheries biologists have been experimenting with the drip-station type of selective poisoning to control gizzard shad. Much more economical than treating huge areas, the new slant emphasizes catching the shad when they are concentrated.

Last year, when camp operators noticed a large concentration of young-of-the-year gizzard shad at central Florida's Haines Creek Spillway, Biologist Ed Zagar set up a gravity-feed drip station, coordinating the drops of rotenone per minute and the rate of water being discharged to arrive at .05 ppm saturation.

The results were immediate and impressive. Quivering shad from three-to-five inches long rose to the surface of the river, their dying struggles setting up a sound like the hitting of heavy rain-drops.

The experiment continued throughout the day with thousands of young shad killed. Bluegills continued to bite worm-baited hooks as though nothing were happening.

One drawback to this experiment was the eventual collecting—and smelling—of the dead shad which did not wash far enough down the river to be out of range of human habitations.

Smokie Holcomb, biologist in charge of the new fisheries laboratory at Eustis (dedicated March 23, 1967), from studies involving gizzard shad, hopes to take advantage of their spawning habits and to catch them in masses when they come into weedy areas to spawn in the spring. For this purpose, Holcomb has designed an experimental "monster" which, through an electrically operated fuel pump, will send out a carefully controlled dose of chemical in the water, the saturation determined by the dilution of the chemical in the tank, by the pressure of the fuel pump, by the size of the orifices in the six nozzles, and by the time the machine

is run. Holcomb's monster will float on three barrels and use a floating boom to hold the nozzles.

Plans are to hand-net the shad killed.

The emphasis is still on the word "experimental."

But with more knowledge of shad habits, these low-maintenance chemical drip stations may provide an economical, effective method of reducing and controlling this problem fish.

WITH MANY ANGLERS in Florida not required to have a license, it has been difficult for the Game and Fresh Water Fish Commission to determine the percentage of the resident fishermen who do fish in fresh water, and the pressures upon these waters. Accordingly, the Commission is doing something about it.

Dr. Don Hayne, of the Institute of Statistics, North Carolina State University, a recognized expert in the field of human inventories, has programmed a survey for the Commission, arranging data collection methods which leaves no room for biased figures. With this information fed into computers, the Commission will have accurate figures upon which it can base future activities.

OPERATION OF THE Oviedo Hatchery near Orlando has been assured for another year by Commission approval of \$3,500. With this money, ponds will be regraded, dikes repaired, and general improvements made.

No longer concerned with fish production as such, work there now deals with aquatic vegetation and how herbicides used on the vegetation influences natural reproduction of fish. Two chemical companies, Chevron and Ortho, are conducting the investigation.

WITH ALL THE NEW launching ramps spread around the state, fishermen may not be the only ones who are getting around, suggests Vernon Ogilvie of the West Palm Beach Commission office.

Biologist Ogilvie believes that several plants, such as elodea and Eurasian milfoil, are being spread by boats, motors, and trailers as the units are moved from one body of water to another.

Possible aids in halting this type of distribution may lie in having launching areas kept weed-free so the mobile rigs couldn't pick these weeds up. Signs and other publicity telling the boat owner of the problem and requesting him to clean his propeller, etc., before he leaves a weed-infested area may also be helpful.

In most cases, boat owners are not aware that the problem exists. ●

Boating Plans

BOATING



Organized boating groups appear to favor improved
and additional boating safety and tax regulations

By ELGIN WHITE

THE NEW PRODUCTS have been introduced, new motors, new gimmicks, everything tagged "1967," and this beautiful month of April signals "Go Go" for most of our boatmen, though many of us have been on the waterways all winter here in Florida.

Circa 1967 and I predict the boating industry will have its greatest year yet. It has to have, if the attendance at all the big boat shows means anything.

To me, a boat show is a lot better for the manufacturer and exhibitor than, say, an automobile show. The hundreds of thousands that flock into a boat show are for real . . . they are the folks who are truly interested in purchasing a boat of some kind, as well as all the gimmick equipment that is displayed to go along with the boat. Many people going to an auto show, on the other hand, are lookers for the most part. Mainly because 7 out of 10 of them will already have a fairly new car. But the boat lookers include many, many people who are contemplating buying that first boat, and they give 'em all a close, hard look.

And from what I've seen at the boat shows this year, the waterways are going to get pretty crowded with aqua enthusiasts.

All of which leads me to an observation: The Florida Boating Council has concluded its recent rounds of public hearings . . . hearings that were

held in Pensacola, Miami, Jacksonville, St. Petersburg and Orlando.

The tremendous turnouts at these hearings justifies my prediction that boating is going to be bigger than ever this year. At each hearing representatives of organized boating groups were on hand and unanimous agreement among those attending was focused on more safety afloat.

The boating public in attendance was in agreement that the provisions of the Florida safety law are adequate, but they urged the Florida Boating Council to seek more funds from the Legislature for safety education. They also endorsed by an overwhelming majority a move to require all power boats in Florida to be registered and pay a Boating Registration Certificate Tax . . . regardless of horsepower rating. The existing law now exempts all motors of 10 h.p. and under.

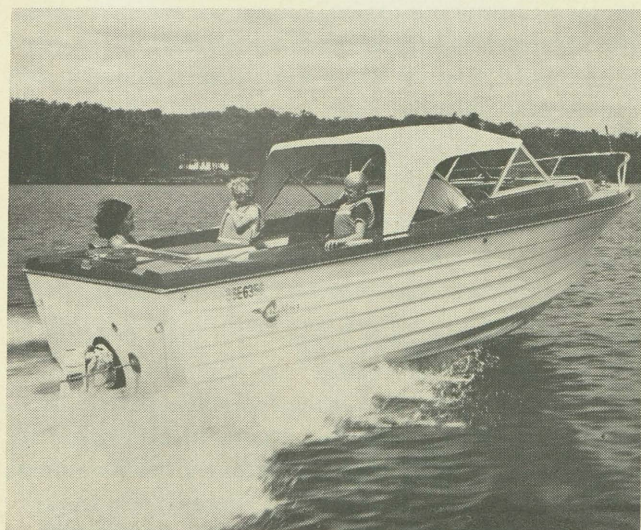
The boaters, virtually to a man (or woman) expressed the view that at present boaters get very little in return for the money they expend on taxes on their craft. They were vehement in their desire that the Legislature change the existing law which returns all but \$2.50 of each registration fee back to the counties.

They think all tax levies on powerboats should be used for administration, enforcement, safety education and for providing facilities such as ramps, markers, etc., for the benefit of the boaters.

They want these funds re-funnelled into such projects as small boat harbors and havens. In other words, the monies taken from them in taxes should be put to betterment of boating and not to local county commissions.

It was pretty obvious that the boaters of Florida, at these hearings, would be less opposed to the present distribution of tax monies if the Legislature would spell out that all monies going to the school boards and county commissions be used *specifically* for boating education.

Senator Randolph Hodges, who held the hearings on behalf of the Florida Boating Council, emphasized
(Continued on next page)



This is the new Crestliner Pirate 19 runabout featuring the OMC 155. It is a fine handling craft, with quick response and plenty of pep.

(Continued from preceding page)

sized that all interested boaters should let their legislators know their desires on this matter . . . that is, if you know who your legislator is by the time you read this.

At the Miami, St. Petersburg, Pensacola and Jacksonville hearings, a proposal for Florida to have a boat titling law, whereas registered boats would be required to have a title certificate, won a large vote, but this proposal was greeted like a spring snow at the Orlando meet. Just shows that all boatmen in all parts of Florida don't think alike.

AND SPEAKING OF BOAT shows, among the many interesting outboard accessories on display this year throughout the country is "power tilt." Available to fit medium and large-size outboard motors, it offers advantages in many phases of outboard activity.

Utilizing a battery-powered electric pump, the power tilt device consists of two hydraulic cylinders occupying the space normally devoted to shock absorbers. A dash-board control button activates the unit and enables the boater to change the motor's tilt at will without leaving his seat.

Ever drift up to a launching ramp in a large outboard boat and wish you were twins—able to run aft to tilt the motor before the lower unit drags bottom and to run forward at the same time to ease the boat's bow gently onto a rough-surfaced ramp?

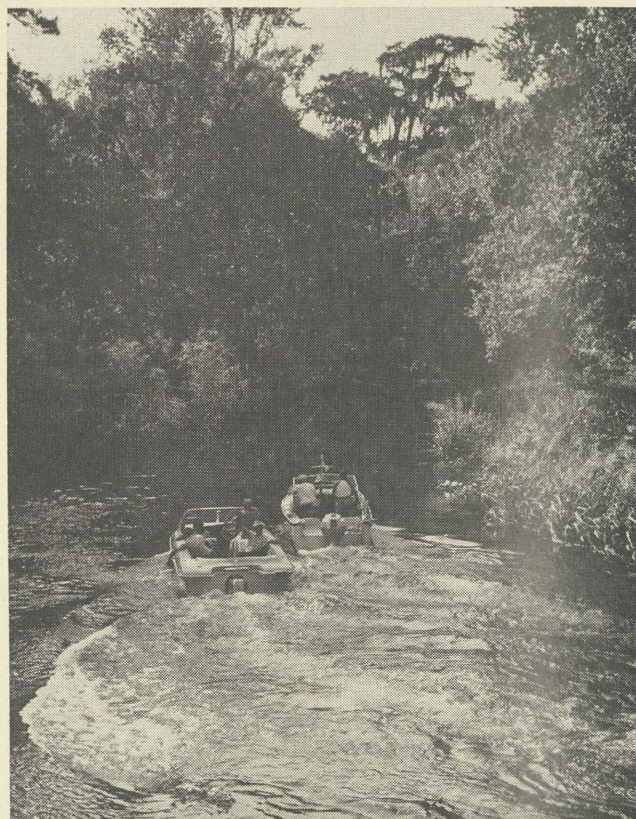
You can be via the twin cylinders of a power tilt device. While it is tilting the motor for you, you can be steering the bow into the right spot on the ramp.

Arriving at a launching ramp with motor in down, or trailering position, a flip of the power tilt switch will put large motors into tilted position for easy launching.

Power tilt also enables boaters to adjust the motor's tilt perfectly while under way to get the best possible speed and riding qualities over smooth or choppy water, whether running solo or with a crowd aboard.

Persons with physical problems that make it unwise to try and pull a big outboard into tilted position find that power tilt does this job for them effortlessly. Lifting the lower unit out of water also prevents it from collecting a forest of performance-killing marine growth.

SINCE April, to me, is just about the prettiest month of the year (in a close race with October) you might want to make some plans to take that last-chance cruise on the Oklawaha River. Soon that picturesque stream, or a good part of it, will



There is still time to cruise the beautiful Oklawaha River, while it's still around. These waters will be diverted in time to form the cross-state barge canal.

be no more as waters of the area will be diverted to the cross-state barge canal.

There are many, of course, who decry this canal's intrusion into one of Florida's most lush and magnificent stretches of wild land. I have been besieged from time to time by proponents and opponents of the canal and have found that discretion is certainly the better part of valor. I won't take sides in this squabble for a couple of reasons. One: That canal is going to be finished whether we like it or not. Every possible means has been tried to stop it, and you might just as well try to stop Lyndon Johnson from being a Democrat. Secondly, there are good arguments on both sides. I have certainly seen some pretty strong evidence on the part of the canal boosters as to what the canal will mean to Florida economically. And, I have seen some pretty valid reasons on the part of conservation as to why the status should remain quo, too.

Re-hashing the pros and cons here would do nothing but bring another rash of mail. I like to get mail, but not that kind.

So, whether you are a pro or a con, let it lay. Just get the family cruiser out and make another jaunt up that gorgeous little river. Those who are con-canalers will gnash their teeth in bitterness as they cruise the quiet stream, realizing its loveliness will soon be a part of history. Those pro-canalers

will enjoy the run too, with nostalgia passing before their eyes, but with a knowledge that soon they'll be able to make a trek all the way from Jacksonville to the Gulf without trailering. That's a bit of compensation, too, and may go a long way in getting an entire intra-coastal waterway from Pensacola to Miami to Jacksonville.

We made a jaunt on the Oklawaha about a year ago and thoroughly enjoyed it, though I must say there were parts just east of Eureka where the going was pretty sticky. We had to nudge the banks with our outboards to move around some fallen trees, and this is one of the arguments against the status quo people. That river is not as navigable as it was in the days of the old paddle wheelers from Silver Springs, and instead of getting better in recent years, the waterway has become a little bit more un-navigable. But be that as it may—this is still a magnificent cruise from the Ocala Boat Basin to Welaka, though there are times you would think you were meeting yourself coming back the way that waterway twists and turns.

It won't be long before the Oklawaha is diverted. Get your cruise in now. You will cherish the memories.

IN SPITE OF Carl Kiekhaefer's objections to them, stern drives are really moving up in the boating world. Ol' Carl can argue from here to Sunday why outboards are better than stern drives, and if anyone in the world is convincing in an argument, it is Carl Kiekhaefer, but even Carl can deal with reality. And reality dictates that a lot of boaters like stern drives, so what does Carl do . . . he continues to push his Mercs but builds stern drives, too.

Mer cruiser gets a pretty big play in Carl's annual press bashes, and we've been having a lot of material just recently float across the desk extolling the virtues of stern drives now being pushed for 1967 by OMC. I tried one of their new Crestliner 19-foot runabouts not long ago . . . and I'm gonna have to have another talk with Carl. D—— if I didn't like that baby!

This OMC job had 155 horses in the rear, and they got more kick than those plastic horseshoes you can paste on the stern of your car. The OMC 155 is a 4-cycle, 225 cubic inch V-6 with a nine-to-one compression ratio. The model includes new intake manifold incorporating a 2-barrel carburetor which increases torque output at low rpm, thus giving you faster acceleration of bigger loads.

The stern drive I handled was a dream. Quick on response and smooth to operate, I was certainly impressed with it. And you can't beat the economy.

What else is new, Carl? ●

spring-time panfish



IT'S NOT A typographical error. Florida's daily fresh water panfish limit is 50 fish, enough to give most anglers sore arms.

Thinking mainly of aquatic monsters, Florida tourists often ignore some of the best panfishing in the world and conservation people shyly state it would be kind of nice if they'd thin out the crappie and bluegills.

Most of the sunfishes are ready to bite the year around but cool weather is crappie time ("speckled perch" or "specks" to the natives). The most popular method for these fish employs cane poles, short monofilament lines and small minnows for bait but when conditions are right spin fishermen catch awesome strings on tiny jigs and little spinner-fly combinations. Crappie stick close to the bottom and adore brush piles and other thick cover. As spawning time draws near they're sometimes found in only a foot or so of water along lake and river edges.

In Florida you can sight "speck beds" from afar because somebody has generally beaten you to the spot—although there are plenty of fish to go around.

"Bream" means bluegill in the South and they're cooperative with small flies, little popping bugs, crickets and worms. A lot of other sunfishes take the same baits.

If you want to wander into the backwoods lakes and creeks you'll find the panfish less sophisticated but a careful fisherman needn't go far from the dock most of the time. Generally the lighter the gear the more the fun. Drowsy trolling will get results if you're too tired to cast and still fishing with a bobber is conducive to relaxation and important thinking.

Bobbers can be exciting too and one record-holding big game fisherman from Miami confessed the other day that a plunging "cork," preferably red and white, gave him all the thrill of a marlin strike. He spends a lot of his time seeking "specks" at Lake Okeechobee.

Confessed amateurs don't even have to rent a skiff and there are hundreds of miles of panfish-jammed canals where you can fish from a folding chair in the shade of the family car.

If it's all the same to you, Florida fish management authorities think it would be awfully nice if you'd bail out a few panfish. It's against the law to keep more than 50 a day but you can have two days' limit in your possession. Some of the wildlife officers are considering carrying adding machines. ●



By CHARLES WATERMAN

Nets and Reels

Netting tired, large size fish can be a simple operation
when you get them turned over . . . near the top

A FELLOW ARGUED politely with me the other day saying that my instructions for leading a fish over a stationary landing net won't always work because fish sometimes decline to be towed over so suspicious an apparatus.

Friends and fish are lost at the same time through improper landing net use and I've probably belabored the business too much but I still see fishermen using their nets as if they were after submerged butterflies.

I may be partly wrong but I suspect the fellow who took me to task is addicted to netting green fish that aren't ready for landing. Also, I may not have stressed the fact that once it starts the net can be moved briskly.

I have done a lot of bungling in my time but I've had pretty good luck with nets. If it's someone else's fish I quietly submerge the net as the tussle seems to be ending and ask him to bring the fish to it. If the fish darts away I take the net out of the water. I don't chase a fish but once its head starts over or through the hoop I move pretty quickly. Dull-colored netting may make it work better but I never bothered about that.

There are occasions when you can net a fish other than head first but that's mighty dangerous if the fish has a multi-hooked lure in his chops. If he snags it on the net rim and then flops out most anything can happen. And as he comes in you should try to keep his head fairly centered in the hoop to avoid the same thing. The fisherman should slack off his line just as the fish goes in to make everything work perfectly.

There are occasions when a fish can be netted green if the net wielder is ready but if things don't go exactly right he should abandon the attempt before really lousing up the detail. I have seen a 10-pound bass scooped within 15 seconds of the time he was hooked in weedy water on light tackle. He just came to the boat on his own and the guy with the net was an opportunist who lowered it into the water as he saw what was happening. He just stuck the net in the fish's way and scooped him when he headed into it. If the fish had turned off he wouldn't have swatted but he wanted that one and took advantage of a break.

A net immobilizes a fish so completely I've often

wondered what a very deep one would do to a 100-pound fish and I'm going to try it some time if I ever get around to it and can find a 100-pound fish to experiment on. I have a hunch that you could lead a 100-pound tarpon up to a boat, slip a hoop over his head and truss him up in a 6-foot net pocket of fairly strong stuff. If you intended to release him it would beat banging away at him with a gaff unless you were a past master and he wouldn't have to be quite so pooped as if you landed him with a gaff in the jaw. I note that a tarpon up to 30 pounds is very easily handled when you run his snout into a net because a fish's reverse gear doesn't amount to much. I've netted tarpon much too long to go all the way in but they were completely under control when you had their heads imprisoned. Submerged in the water and handicapped by the clinging mesh I'll bet no 100-pounder could pull more than 15 or 20 pounds worth, much less if he were really tired.

THE ONE TIME when you need your wits about you with a conventional baitcasting reel comes when a fish hits hard. Freeze to the handle and he'll crack your knuckles at best or break off at worst. Free spooling reels with drags eliminate this hazard but a lot of us still like to use the old-fashioned kind.

The best way is for a right hander to let go quickly with his reeling hand, at the same time clamping down with his left thumb for as much pressure as he wishes to apply and this sounds simpler than it is.

Most men cup the reel in the left hand when reeling with the right and can easily apply thumb pressure if they get the right hand away from the spinning handles fast enough. My wife and some other small persons keep the left hand *ahead* of the reel on the retrieve so as to get sufficient leverage on the rod. Nearly every time she gets a really hard strike on a fast retrieve I can hear the real handle sputtering on her fingers and I wince in anticipation of a breakoff but it doesn't happen as often as you'd think. Still there's always a good chance of a backlash before she can put a thumb on the spool.

These hazards don't exist with a pushbutton reel



Long "nose" on these top-quality Shakespeare pushbutton reels will jam on some handles (above), but they are efficient in feeding line during a cast.

or with a free spooling drag number but if you were brought up on the simpler kind you like to use it.

FOR A LONG TIME I considered the pushbutton spinning reel an implement of the rank beginner, the child and the fellow who was too lazy to learn to cast.

It's still the easiest of all reels to learn and I certainly wouldn't junk my other tackle but the pushbutton got better as it went along and there are some spots where I'd say it's first choice.

The worst of a pushbutton is its complexity coupled with a necessity for keeping the price down. I've often said that one could be fine if fishermen would spend a hundred bucks for it so it could have some added durability but the guy spending that much for a reel doesn't look for a button type.

A fundamental difficulty is that the line coming off the spool is curved or "bent" abruptly before it feeds through the front opening and out through the guides and this cuts down on length of the cast. It also causes line wear where the mono must be bent around a pickup pin.

Just lately I've been casting some with a Shakespeare 1766 pushbutton which I feel is about as good as any reel of the type and the fishermen I've asked to try it have been pleased, using 8-pound monofilament line. For my money the big feature of this reel is the roller pickup which should save a lot of line wear.

My own personal gripe with all pushbuttons is that I've never found one with which you could "feather" or "slow" the cast. In other words, when you push the button the lure stops in the air as if it had hit a brick wall and this is true in my case despite hopeful advertising that various gadgets help you with more control. The Shakespeare I'm bragging about has a soft pad that should slow the line rather than stopping it but it won't work for me and the Shakespeare folks never said it would.

Undoubtedly a real feathering device could be built but I don't think there's much demand for it. A tackle designer told me the other day that he had perfected a device which would permit extreme accuracy with the pushbutton. In fact such a mechanism was used to win some big time accuracy tournaments. I guess it never has been patented and hasn't appeared on any factory reels. Either the manufacturers feel the added sales wouldn't be worth the bother or they anticipate trouble in mass producing such a unit. Maybe we never will have an "accuracy model" but if we do a lot of plug casters are going to hang up their old reliables.

When using a soft rod for short casts with very light lures the pushbutton is much better than a conventional spool reel, simply because you don't have to overcome the inertia of a turning spool before the lure goes on its way and I never could cast accurately with any plug of less than 1/4-ounce, even with the lightest tournament casting reel I could borrow.

Although I've joined a lot of others in taking jibes at the stiff casting rods with very light action tips it may be they would be just the thing for very light lures and a pushbutton reel.

Buyers of pushbuttons should be certain to check their rods with the reel before laying down their money as some offset reel seats will not accept the long nose of a pushbutton reel. I'm no engineer but I can see that the long nose may help in running out line smoothly.

Most pushbuttons are for light use although bonefish have been caught on ordinary featherweight models and I know of some big tarpon landed by careful anglers with what I'd call middleweight pushbuttons.

Frankly, I believe the price of these reels is a fairly good measure of quality.

MORE ABOUT MONOFILAMENT line on baitcasting reels. Not for me except in open water. Despite persistent efforts of mono line engineers, I'll still pick braided line for shoreline plugging because it brings better accuracy with less thumbing.

(Continued on next page)



Charley Nordmann works a boat gently against the current while Wimpy Steerman and Jack Orchard cast. Some fishermen say a lure must be worked downstream to appear natural.

(Continued from preceding page)

A few loose loops on a reel will fan the pillars hard enough to fracture mono line and bring about surprise breakings. Of course the same thing can happen with braided stuff but it's less likely because most of us don't throw so many loose loops with that kind.

On the other hand, in open water, monofilament sinks fast, is hard to see and will take more of a beating against underwater obstacles.

When spinning started, everybody wanted to use braided lines on spinning reels. Now that the "bucket bailer" and the "pencil sharpener" rule the roost, new baitcasters insist on adapting mono to conventional reels. It has a place all right but accurate coverage of a shoreline isn't that place.

PLUG CASTERS are using line that's too heavy. Even in yanking overweight bass from massive underwater shrubbery, I figure 18-pound test line is enough. Twelve-pound test is better for most purposes and I see little use for anything lighter than 10. The big stuff won't cast well.

Fishermen often lay down their spinning rods with six or 8-pound test line and pick up plugging outfits with 35-pound line—then complain the latter won't cast.

TROTLING FISHING is a mysterious science to most Florida anglers who don't take much interest in the commercial catfisherman unless his set tangles in their propellers or snags their lures and his

baits, which range from chicken innards to toilet soap, don't interest them much.

I'm not hep to trotlining myself, having limited experience in that department, and I marvel at the dexterity with which a professional handles a whole batch of hooks and long lines without tangling and puts a big catfish in the boat with nary a false motion.

A river trotliner once explained to me why the lines sometimes run crosswise, sometimes parallel to the shore and sometimes at angles to the shore. He said moving fish tend to follow definite unmarked routes in the current and that he would locate routes by random, cross-stream sets. Suppose he found hooks No. 5 and 6 on a cross-current line most productive. Then he'd change the whole layout so that his hooks all lay right in the fish path—probably nearly parallel to shore. Then, instead of having catfish only on hooks five and six, he'd begin catching them all along the line.

This is probably so elementary as to appear silly to an old trotliner but right interesting to less informed folks.

A GOOD BASS FISHERMAN I know says he catches a lot more fish in moving water if he can cause the lure to move downstream.

He likes to move his boat against the current to make the lure more natural on the theory that a fish's food comes with the current and that feeding fish face upstream.

This is the principle of free lining bait. Most casters, however, don't want to row or paddle upstream so it would seem the easiest way to fish "downstream" would be cast back to where you've come from and then make the lure catch up with the boat. But that has a lot of disadvantages since the boat has already passed the fish you're after and may have scared him stiff. Most of us will continue to fish slightly ahead or, at least, at right angles to the current.

No one disputes that the fish is likely to be facing upstream but if the water isn't too swift (most Florida streams aren't) he'll get a pretty good look as the bait comes across current above him. Slowly worked surface baits can drift with the current and a downstream shiner rarely need be taken out of the water. Of course anyone casting a shoreline will want to get in a lot closer than the boat moves. It is a good trick to cast at a downstream angle and give yourself extra time to manipulate a surface dingus or a slow-sinking something else. A fast-reeled lure going upstream may catch some fish but certainly isn't natural.

This is food for thought and after reading the above I'm not sure I understand it myself. ●

Florida Camping

In addition to many camping facilities, there are some state parks with rustic cabin rentals, such as Myakka River State Park. Complete information about all park services may be obtained from the Florida Board of Parks, Tallahassee, Fla. 32304.



CAMPERS IN EVER increasing numbers are finding Florida State Parks the answer to a fun vacation on a budget any time of year.

This new wave of campers reflects the changing leisure-time tastes of the American public toward more family outdoor recreation, and has pushed the number of Florida parks offering camping facilities from a total of six in 1950 to 24 presently in operation, more in the planning stage.

Though the trappings of a camping trip have changed considerably in the last ten years or so—most come in campers or trailers instead of pitching the time-honored tent—the attractions which drew them are pretty much the same.

Glittering stretches of beach; natural scenery, from peaceful lakes bordered by hammock land and moss-draped oaks to lush tropical foliage glistening in the sunshine; a chance to participate in sports every month of the year—fishing, boating, water skiing, golfing, hiking, almost any kind of recreation you can name; these are some things that draw more and more visitors each year.

Not only summer visitors either. Campers who want to spend a “green Christmas” instead of a white one head for Florida over Christmas holidays, camping as they go, and letting the children have, as one put it, “a non-commercial” Christmas.

One family spending Christmas at Bahia Honda State Park in the Florida Keys claimed to have the most fun of their lives with a celebration which included hanging pine cones on a palm tree in lieu of the traditional evergreen, and singing carols around a campfire Christmas Eve.

The rising cost of living makes the cost of a camping vacation doubly attractive. Fees at all Florida State Parks are \$2.06 per night per camp site and 25 cents per day for electricity, if used. Camping areas have picnic tables and grills, central restroom facilities with hot and cold water, showers, lavatories and laundry tubs.

Campers should bear in mind that camp sites are not reserved, and are obtained on a first-come, first-

served basis, so that it is necessary to plan arrivals at parks as early in the day as possible. Park closing times vary, so you should check on those, too.

Camping permits are obtained on arrival from park superintendents, and entitle campers to a two-week stay with renewals possible. No more than four two-week permits are allowed in a six-month period.

Campers are subject to standard state park regulations: no alcohol, no pets overnight in a park, no firearms.

In addition to the natural attractions within the parks, campers often find it convenient to tour the surrounding area, using the park as home base. Campers at Anastasia State Park near St. Augustine can visit all the attractions of the Oldest City in the United States.

A drive through the rolling, white-fenced pastures of the horse raising country around Ocala could be a part of a day's touring for campers at Lake Griffin State Park at Fruitland Park in central Florida.

Nightlife in Panama City can be enjoyed from St. Andrews State Park nearby, and Jacksonville is an easy drive from Gold Head Branch State Park northeast of Keystone Heights and Little Talbot Island State Park near Jacksonville.

No matter where you are in Florida, you are within a two hour drive of a state park. Twenty four parks now offer a total of more than 2,000 camp sites compared with only 15 sites in parks 17 years ago. Last year, some 903,801 campers, including more than 225,000 families, camped in Florida parks, and figures for the first quarter of the current fiscal year indicate that their numbers this year promise to climb even more sharply than last.

Looking to the future, the Park Board with “the fastest growing park system in the world” estimates that by 1970 it will be host to some 2,000,000 campers annually at approximately 5,000 camp sites in 35 parks. Even that is a conservative estimate. ●



Bird Bander's Holiday



Royal and Sandwich Terns, above, nest in simple depressions in the sand, densely packed, sometimes by the thousands. Because terns don't all lay eggs at the same time, the hatching season is prolonged from mid-June through August. Somewhere between, there's a time when most of the young are out of the eggs, but still too young to fly. That's the time for banders to get busy. After a short stay of two or three days in the nest, left, and looking more like young chickens than seabirds, young terns will gather near the water's edge to await the parents bringing food from the sea.

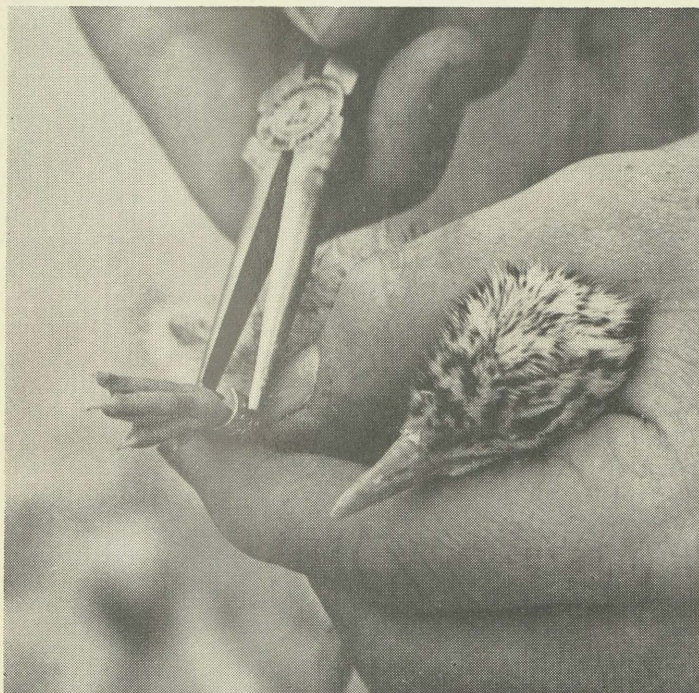
BIRD-BANDING is a hobby for most people who do it and many wildlife specialists do it on the job. For some of us, it's both a hobby and a job.

Each summer several bird banders—mostly wildlife people—meet on the Gulf coast of Mississippi to spend a week's vacation banding Royal and Sandwich Terns on the offshore islands of Petit Bois and the Chandeleurs. In four summers 13,000

baby terns have been banded and 100 bands have been recovered and reported via the bird-banding office of the U. S. Fish and Wildlife Service. Some were found in the West Indies and some in South, Central and North America. A few even made it to the Pacific coast of North and South America.

On our last visit to the colonies there were adult terns that had been banded as flightless chicks

Flightless chicks, at right, can be easily herded into a portable wire pen, and when enough have entered, the pen is closed and banding begins. A fast bander can place over 300 bands per hour. A simple squeeze of the pliers, below, and another tern is wearing special identification tag.



BIRD BAND RETURNS

Most bird band recoveries are from birds found dead or sick. If you look on the leg of the bird carcasses you find, especially along the beaches, you'll be surprised how quickly a bird band may be found. When a bird band is discovered, send it quickly as possible to the U.S. Fish and Wildlife Service, Washington, D.C. 20240. You will receive a request for complete details about your find, plus later file information about the bird.

After banding, and when grown up, No. 743-50001 took off southward, for the winter, with odds about 100-to-1 that he would ever be heard from again. There is a good chance, however, that his band may be the first returned . . . from Chile . . . or Senegal. If YOU see him, send in information.

Photo Story

By **LOVETT WILLIAMS**

Game Management Division

three years before. They were the first of the banded terns to return to the home colony to nest, probably after spending the three years on a West Indian island or some other faraway place to the south.

When all the data are analyzed, we'll know a lot more about Royal and Sandwich Terns, but even if no new scientific information came from it, I think we'd band them anyway. ●



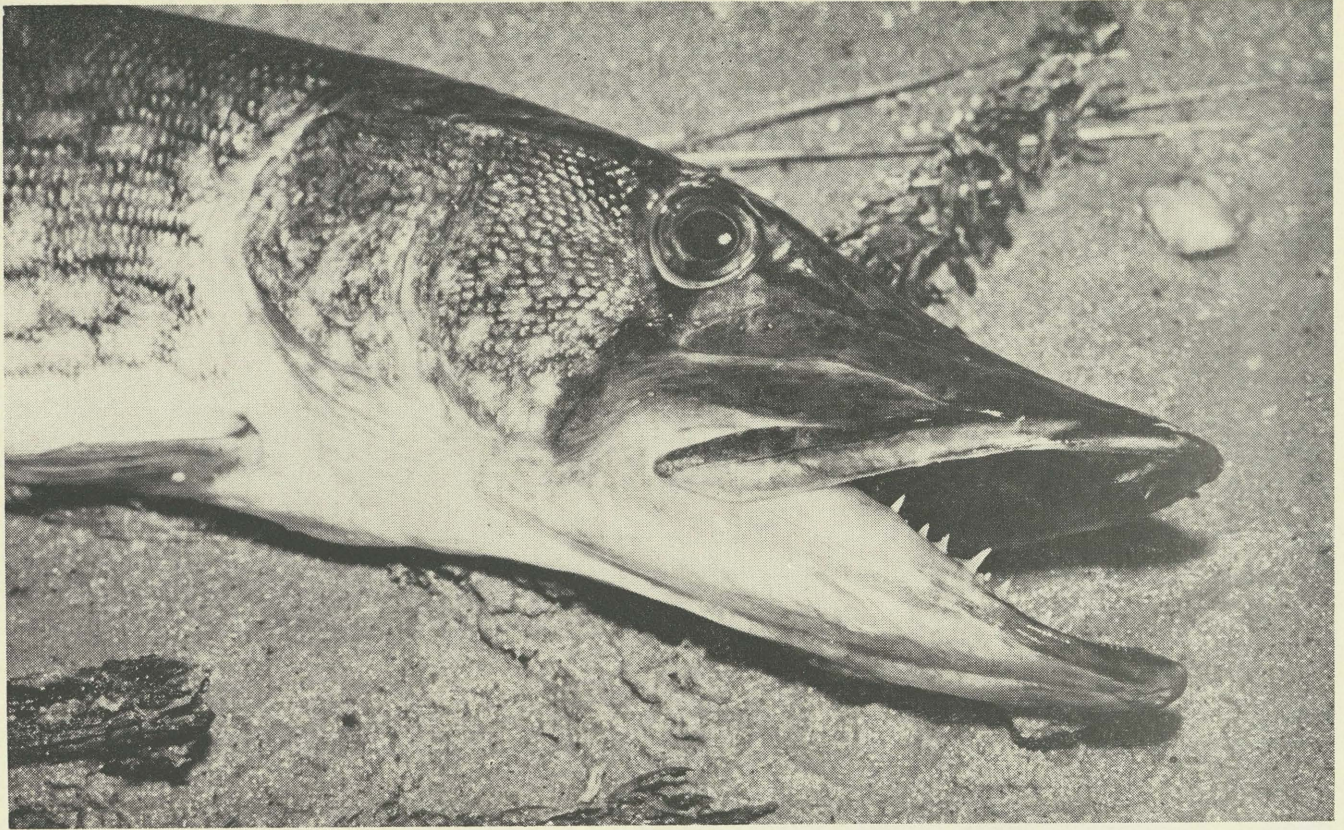


Photo By Wallace Hughes

The chain pickerel's mouth is something you don't want to be sticking fingers into. Also, its wicked teeth requires the use of a wire leader rig, when angling, to prevent the cutting up and loss of fishing line.

The Chain Pickerel

Is it a pest — or a prize — this long-jawed eating machine?

KARL RUDD CHEWED SLOWLY on a chicken leg and squinted out of a window at his Kissimmee tackle shop overlooking Lake Tohopekaliga.

Then he decisioned, "I think they're a darn pest."

About a mile away, Joe Funk, a regular visitor from Mishawaka, Indiana, stood on a short bridge spanning a dark canal leading into the same lake. Hands in his pockets, Funk watched his red-and-white floats bouncing in the rippled water.

After a moment, he voiced his opinion. "That's all I fish for. They're more fun to catch and better tasting than bass, bluegills, or specks."

That's the story of the chain pickerel—or jack, jackfish, or pike—in Florida. Jeered, cheered, feared, it's a lowly baitsnatcher to some, a fighter and a champ to others.

I'm no pickerel specialist. I've never fished for them deliberately, but I've caught plenty of them

accidentally. They've never impressed me as being all good or all bad.

My recollections suggest they're the fish that comes along to louse up your last shiner just when you get definite feelings there's a hungry eight-pound bass in the vicinity. Or that it's the fish that can supply a little excitement on an otherwise dull day.

This elongated, duck-billed comic is kissin' kin to the northern pike and muskellunge. In general, the trio are look-alikes, but in addition to a fully scaled cheek, the chain pickerel is marked with a series of irregular chain-like designs down its greenish-bronze sides. Also, a dark "teardrop" hangs under each eye.

No need to worry about identity in Florida, though. With the exception of the dainty little red-finned pickerel (much smaller and with colorful

fins), it's the only one of the catchable clan you'll run into in the Sunshine State.

This group of fish is noted for their appetite. Like Cub Scouts on a weiner roast, they eat everything in sight—a crippled sparrow, an unwary frog, a hapless shiner, or a yellow-spotted popping bug.

The chain pickerel has been fortunated by nature in having fibroid bones in its throat, giving it the dubious distinction of being able to swallow another fish as deep from top to bottom as the pickerel's own body depth. A bass, alas, condemned to a firm throat structure, is restricted to a meal as wide as its mouth.

A pickerel is not too particular where it hangs out. It likes fairly clean water, it's true, but it is spread throughout the state from north to south Florida, hotspots being the Dead Lakes, Lake Tsala Apopka, Lake Tohopekaliga, Lake Okeechobee, and the Everglades Canals—and most places in between. It'll turn up when you least expect it.

It prefers sandy-bottomed weedy waters, liking to lurk in the shadows to waylay its unsuspecting prey. Its capable camouflage works to good advantage.

By ART HUTT

As parents, the pickerel are true pikers. They go through the spawning ritual in late-winter/early-spring, the male and female performing a physical, tail-lashing, fertility dance along a weedy shoreline or in a flooded pastureland. Once the sticky eggs are scattered, the parents develop amnesia and act as though it had never happened.

Depending upon temperature, eggs hatch in seven to ten days. When the sac fry run out of stored food, they turn to tiny invertebrates, then on to minnows, and finally up to full-sized stuff. When it plans to knock off another fish, the chain pickerel grabs it in the center of the body, half-kills it with those wicked teeth, then works the fish around head first before swallowing it.

David Starr Jordan, an early 1900's fish specialist whose observations are still respected today, called the chain pickerel "a machine for the assimilation of other organisms." It's the Greedy Gus of the fish world with many experts contending that its rapid rate of digestion causes it to eat an equivalent of its own weight daily. And, while cases of fishy cannibalism aren't rare, members of this family are noted for habitually dining on their smaller brothers and sisters.

Its gastronomic greediness has placed the chain pickerel under surveillance in Florida as a possible
(Continued on next page)

Found throughout the state, the chain pickerel prefers weedy waters with sandy bottoms; often lurking in the shadows to waylay unsuspecting prey.

State News Bureau Photo



(Continued from preceding page)

predator to keep our most populous roughfish, the gizzard shad, thinned out in ranks. Jon Buntz, fisheries biologist investigating this fish out of the Game and Fresh Water Fish Commission office at Lakeland, doesn't believe the pickerel could do the job alone but suggests that bass and pickerel working as a team might have some effect.

Despite the persistent European tale of the "Emperor's Pike" which dates back to 1558 and establishes a certain pike as being 19-feet long, 267-years old, and weighing 550 pounds, chain pickerel in Florida (and we should be grateful!) grow neither that long, old, nor heavy. About 30 inches, maybe 5-6 pounds seems to be about the biggest. But even that's a husky fish, especially considering the armament.

A chain pickerel's mouth is something you don't want to be sticking your fingers into. Up front, it has small, closely packed "holding" teeth. Studded along the jaws are sharp, strong, erect fangs for seizing—which should be enough teeth for any respectable fish. But, no, this "machine" has three bands of backward-directed teeth at the roof of its mouth mounted on flexible cartilage. Once its prey gets hooked into these, there's no changing of plans and backing out.

To deliberately fish for pickerel in Florida poses no real problem. Any tactic used for bass will work. If you are real serious about it, you'll fish in those lakes or rivers noted for their pickerel supply and emphasize the weedy areas which they prefer.

I'm convinced that live bait, such as a three-to-four inch shiner, might work out best in the long run. Use a float, and work your shiner over or along the weed beds. The big ones seem to like weedy fringes facing deep water. If you catch only bass, don't be too disappointed.

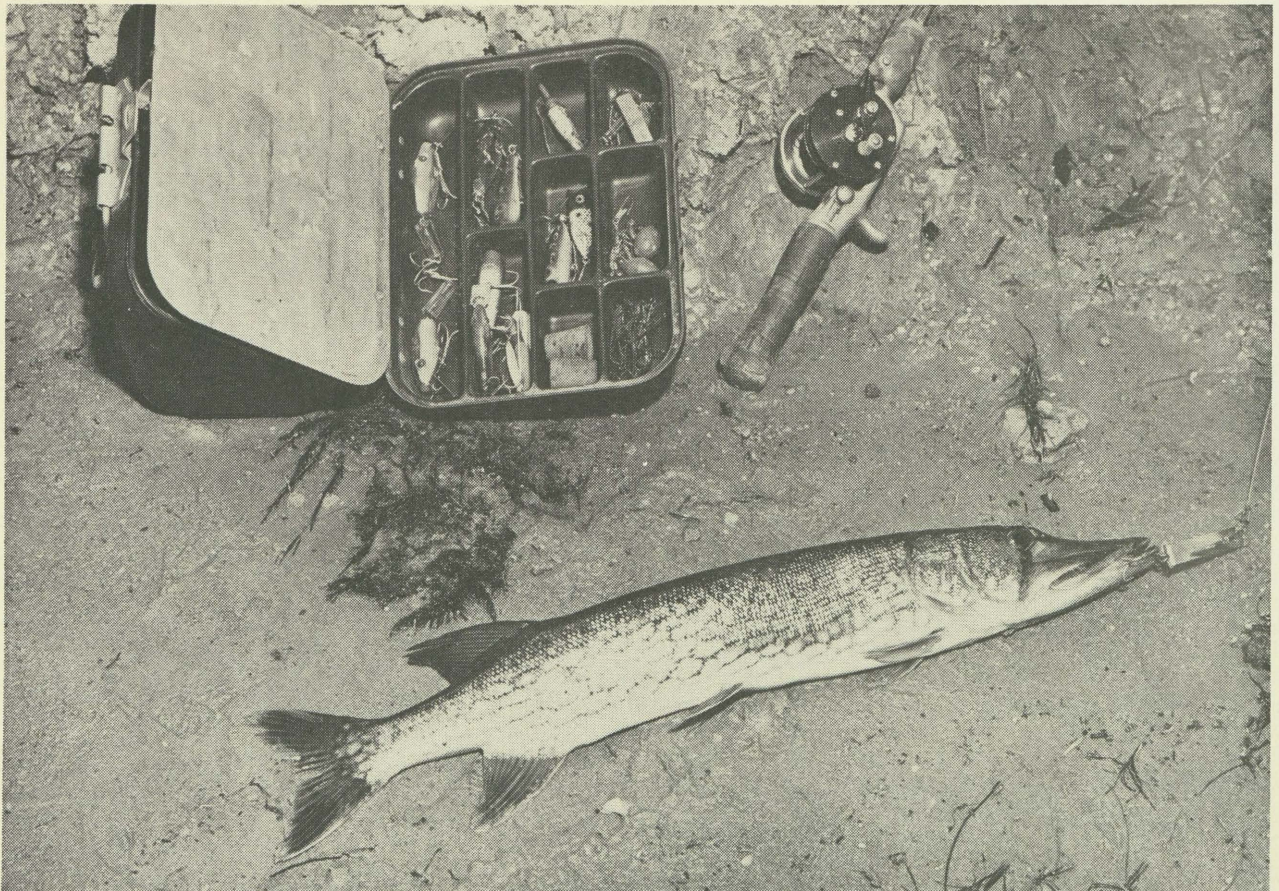
But for gosh sakes, use a wire leader. While fang-like teeth which your line can drop safely between are not noted for line cutting, the combination and numbers and types of teeth in a pickerel's palate can pop your line in short order—especially disconcerting to the bass-bugger working a shiny-new creation on delicate monofilament.

A net, and disgorging or pliers should be handy for the landing and unhooking ceremonies.

Even a pickerel's fight is surprisingly bass-like. It strikes savagely, jumps, circles—and gets up to twenty-miles-per-hour on some of its dashes. Despite a brain size of only one-thirteen hundredths of its body weight, the pickerel knows enough to head for the nearest weedbed or log when it feels the hook, too.

Considered a lowly bait-snatcher by some fresh water anglers, the chain pickerel can be hooked by most fishing techniques that work with bass.

Photo By Wallace Hughes



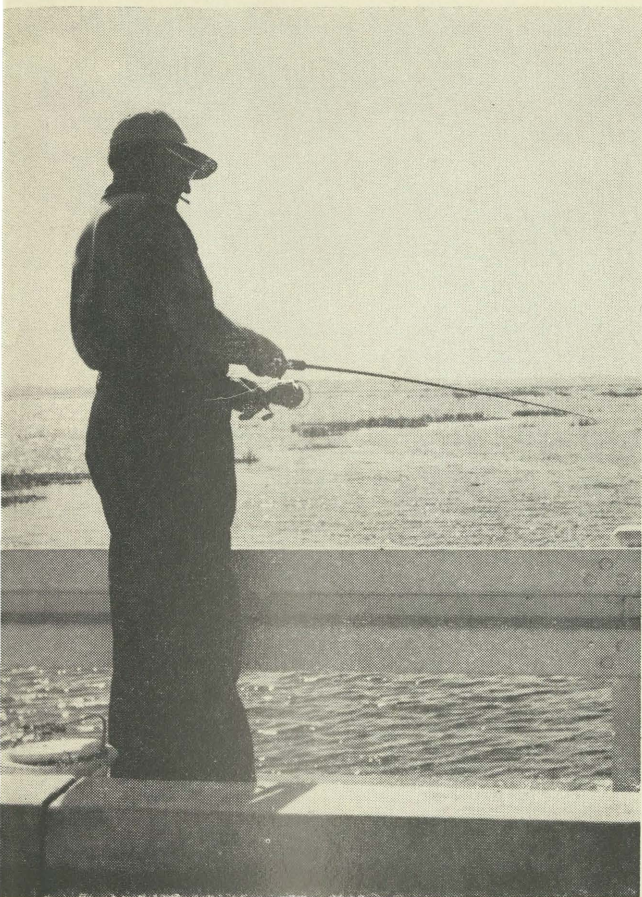


Photo By Art Hutt



State News Bureau Photo

Bridge fishing for "jackfish" at Lake Tohopekaliga, near Kissimmee. It is the weedy-water lakes such as this that are favorite haunts for the chain pickerel. A Lake Hatchineka angler, right, checks his bait after adding a surprise pickerel catch to his string of bass.

Sometimes you can appeal to a pickerel's short temper instead of its long appetite by annoying it with fast-worked surface lures.

As my brilliant children used to say at mealtime when all the meaty portions of the chicken had been served, "now we get to the Napoleon," meaning, in pun awful, that the "boney-part" was coming up.

For, if there's one thing that makes a pickerel unpopular, it's that extra series of Y-shaped bones which run the length of this toothy spindle's body. Holding body and soul of the pickerel together, these bones can unnerve a conscientious cook or shatter the will of a sensitive sampler.

But there are tricks to every trade—even chain pickerel cookery.

To place heat right next to the bones so they will dissolve, you can scale, fillet, and then cut the fillets into "fingers" slightly smaller than the commercial offerings found at your frozen food counter. Or, after scaling, cut the pickerel cross-wise into half-inch saddles or "froglegs." Still another, practiced by Doug Jennings, owner of Jennings Fish Camp on Lake Pierce near Lake Wales where pickerel are common, is to scale and fillet the fish, then lay

the fillet skin side down and make vertical slices about a quarter-to-a-half inch long down to (but not through) the skin. When fried, the skin holds the fillet intact.

Confirmed pickerel eaters brag about its flakey, firm, delicately flavored flesh.

Jennings believes the popularity of pickerel is on the upswing, with anglers gradually beginning to accept it as a gamefish. He has customers at the camp who will deliberately fish for them, taking off with a half-dozen shiners, returning several hours later with four-to-five nice pickerel.

"What I like about them," says Jennings, "is that they'll give my customers some action on a cold windy day when the barometer is changing and the bass won't cooperate."

As a general rule, pickerel will bite "from January to January," but when weed conditions change seasonally (as they do in Lake Pierce, for example), they can better be described as a wintertime fish.

It all boils down to your having a choice.

You can ignore the chain pickerel and look only at its bad points or you can enjoy him for what he is—toothy but tasty, skinny but scrappy, boney but bountiful.

You'll just have to make up your own mind. ●



The main entrance to "Historic Sugar Mill," or the 17th Century Mission, as it is described in New Smyrna Beach tourist leaflet.

IF YOU TRAVEL one mile west on Florida Highway No. 40 from the center of New Smyrna Beach, then turn south for three-quarters of a mile, you will come to a simple gateway. Enter that gateway and you are in a forgotten world; the world of the Florida of 13 decades ago, the world, perhaps, of Florida of the Spanish missionaries of the 1690's.

For in a grove of Florida oaks, breathtakingly festooned with Spanish moss, lies the ruins of an old sugar mill, thought by many historians to have been an earlier ruin of one of Florida's ancient Spanish missions, later converted into a sugar mill. Indeed, a tourist leaflet put out by the New Smyrna Beach Chamber of Commerce describes the beautifully preserved ruins as a "17th Century Mission."

It has long been known with historical certainty that New Smyrna Beach was the site of a large Indian village called Coparaca. It is also known that Spanish missionaries preached their simple gospel in that region in the 1690's and established the mission of Ataciumi, although not necessarily on the site of the sugar mill. In 1696, the Jororo Indians rebelled against the authority of the head of the mission, Fray Luis Sanchez, who had forbidden them the observance of some of their tribal customs. The Jojoros massacred the priest and two of his Indian converts, and looted and burned the mission.

It is not difficult to picture the blackened ruins of today, with their cathedral-like arched window openings and doorways, as the remains of a church.

New Smyrna Ruins

another historic memorial

The ancient structure—or at least what remains of it—is fashioned of coquina, a native rock lovely of texture and color, formed by the tiny shells and sand of the nearby sea. The design of the building is exquisite, the workmanship superb; two factors seemingly incongruous in the fabrication of a sugar mill.

At this point occurs a long gap in historical records, unbridged until the arrival of the Turnbull Colony into the area in 1767. This colony, headed by Dr. Andrew Turnbull, a Scotch physician, was the largest group to establish a settlement in the New World at any single time.

Dr. Turnbull was delighted with the site chosen for his settlement, a lush land bordering on a beautiful beach whose hard white sands are more than 200 feet wide at low tide. He promptly named

the settlement New Smyrna, in honor of his wife whose birthplace was Smyrna in Asia Minor. For nine years members of the Turnbull Colony tilled the soil and built a system of drainage canals and irrigation ditches which are in use today. But in 1777—one year after the declaration of American independence—the colonists disbanded and migrated north to St. Augustine. The settlement of New Smyrna fell into ruins.

Again the area lay dormant and deserted, until 1803 when a series of land grants resulted in its re-settlement as a city. Sugar plantations sprang up in the outskirts and adjoining one of these was begun the construction of the sugar mill or—as always must be taken into consideration—the reconstruction of an ancient mission for use as a sugar mill.

It is easy to see today how the well-planned mill functioned, although only two of its iron kettles and the walking beam of an engine remain. Cane, fresh cut from the fields, was loaded onto great carts and transported to the crushing house of the mill. There it was passed between heavy iron rollers which were powered by a wheel with huge cogs, actuated by a steam engine. The engine got its steam from a nearby boiler. Water for the boiler was drawn from wells, still to be seen at the base of a tall chimney.

Juice extracted from the cane was placed in a battery of kettles and heated. If only syrup was wanted, that was the end of the process. But if sugar was desired, it was necessary to transfer the hot juice from the kettles to crystalizing vats where it could solidify. Visible within the ruins are four kettle foundations, plus the great fire pit and the base of a chimney. Also evident is the ravages of the fire caused by the Indian raid which destroyed the mill and left desolate the countryside until the latter half of the century.

The mill was built by a William Kemble in 1830 for William Depeyster and Henry Cruger of New York, on land belonging to the estate of Ambrose Hull. Cruger was appointed manager of the sugar mill and in addition ruled over its adjoining sugar cane plantation.

The story of the fire and the Indian raids which destroyed New Smyrna are related in an old chronicle:

A Mrs. Sheldon, wife of a foreman for the Cruger and Depeyster property, attended a Christmas Dance at a nearby plantation; that of Stamp and Hunter. She reported the following morning that she had seen painted Indians lurking about. One known as John Caesar, said Mrs. Sheldon, had even tried to lure Mr. Hunter outdoors on a pretext of cattle trading. And in the shadows had been a motley assemblage of Indians and negroes known as "Philip's Band."

Next day Philip's Band struck, plundering the plantations and setting fire to the sugar mill and to the houses in New Smyrna. The townspeople and the folks from the plantations fled and took refuge in a schooner anchored in the New Smyrna harbor. Finally the schooner took off loaded with refugees, for Bulowville along the Halifax River, while the renegades destroyed everything that was left in the town, plus the lantern of the lighthouse at the inlet.

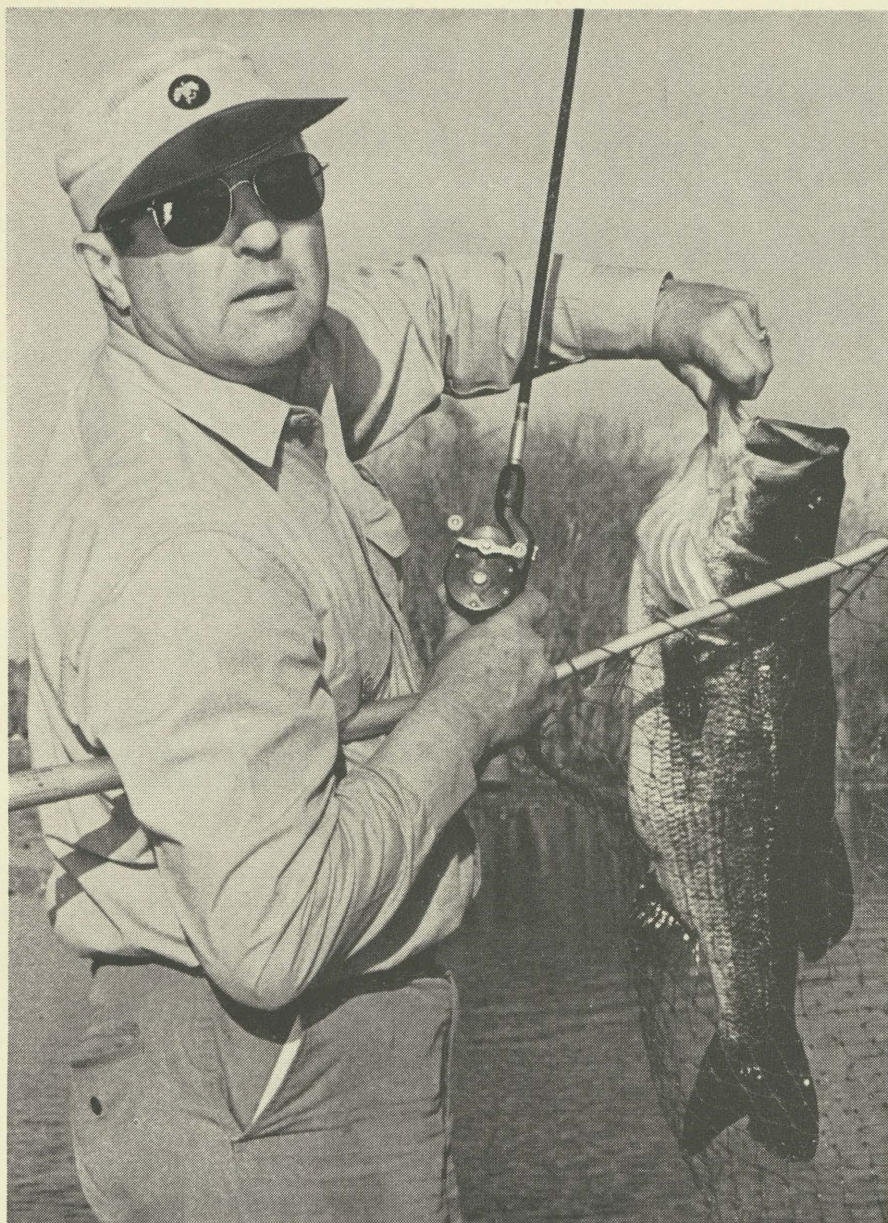
In 1893, Washington E. Connor and his wife Jeannette bought the site of the Cruger and Depeyster plantation. They believed the ruins to have been that of an old Spanish Mission whose crumbling foundation was used for the later sugar mill. And in this belief they deeded the property to the Florida State Historical Society in 1928.

In 1951, the cathedral-like ruins and their surrounding grove of oaks was presented to the Florida Board of Parks and Historic Memorials for use as a public park. ●

By JOHN FIX

These beautifully preserved ruins, with cathedral-like arched windows and doorways, are not difficult to imagine as mission-style remains.





The trickles and puddles
of backwoods fishing
often provide exciting
action, but anglers
should "approach" these
seldom used strange areas
with certain cautions

Out of the Way Bass

By CHARLES WATERMAN

A BIG, FALLEN TREE was all that protected this little cove from the wakes of constantly passing boats. The tree lay clear across it and made a separate pond of what would otherwise have been a small bay.

You couldn't get back there with a boat, it was too deep to wade and the bank was heavily overgrown. All you could do was pull the boat up to the log and cast over it, which I did.

The bass which stormed out after my plug would have weighed about four pounds but I never landed him because I hadn't bothered to figure how I was going to get him over the log. After breaking him off it occurred to me that I could have stood on it but logical things like that come to me slowly.

It had taken only a few seconds to connect with a fish that hadn't been bothered by the fishermen who crowded the lake and it was the only worthwhile bass I raised all day. He was off the beaten

path if only by the 4-foot width of a cypress log. Most out-of-the-way fish aren't so easy to reach but a lot of them are equally naive once you get to them. That doesn't necessarily mean a pioneering expedition on survival rations but it pretty well eliminates the big bodies of water churned by high-powered outboards and higher-powered yachts. It may also mean the boat ramp is primitive and you'd have to take your soft drinks from home. You might even get wet feet.

Most fishermen go on the assumption that there's more room for fish in big waters and the resultant heavy pressure makes the puddles and trickles show up even better. Florida bass waters are generally fairly shallow which exposes the fish to the fisherman and subjects them to involuntary gymnastics as the result of heavy boat traffic.

These many fishermen aren't going to clean out the fish but they *are* likely to skim off the ones that

just can't wait to grab something with hooks. Get away from the crowd and you'll find dumber and more enthusiastic fish where lures are concerned but, at the same time you'll find fish that are more afraid of people and the real winner in small, seldom fished waters moves softly as a barefooted Seminole.

I've seen bass so accustomed to roaring motors and bouncing wakes that they barely moved aside for boats and seemed to pay no attention to the underwater racket—but fish of the lonesome pools may consider the slightest man-made noise a danger warning—which it is.



Not all small water bass, left, are little. This one came from a shallow backwater that was barely deep enough for any cover. The "jungle stream," above, was not exactly reached after a rigorous journey. This fisherman is standing 30 feet from State Road 11, near Bunnell, where the bass fishing is sometimes pretty good. Deep Lake, right, near Copeland, is off beaten trails but the fishing depends on the water table, and remoteness isn't an automatic assurance of good fishing.

I have fished a lot with a fellow who idles a small motor while casting a shoreline. Along the busy St. Johns government channel he'll corner a bunch of speckled perch (crappie) and land a dozen in the same spot with the little engine ticking all the time. But when I've gone back into the quiet, shallow creeks with him he just keeps moving and expects only a fish or two from each brush pile or weed patch. The reason is that those fish are too spooky to gobble spinner-fly combinations while an outboard motor throws mud in their faces.

That's one reason why some fishermen return to the crowded areas after failing in secluded spots—they've tried to use their everyday whackity bang methods in quiet waters where the fish can almost hear the dimes in your pocket. Sure they're hick fish and maybe they'll bite anything but they're not acclimated to sputtering motors, clanking anchors and shuffling feet.

So when you leave the crowd behind (and sometimes it means only sliding up into a creek mouth for a few yards) adopt your gumshoe tactics. Be a little more careful with your casting, use lighter lines and leaders and beware of lures that splash ponderously.

Years ago I wrote in *FLORIDA WILDLIFE* of Deep Lake, an isolated spot near Copeland, Florida. In those days we used to go in there with a little aluminum pram along a 4-foot-wide creek. If you used your paddle carefully you'd clean up on huge bluegills and small bass the first time around the lake. The second lap was generally a total loss. Deep Lake was full of fish but they were seldom disturbed and the commotion of the first go-round

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sent them into hiding. Even the first time along the short shoreline you needed a rifle on the water to do much business.

In more heavily fished waters I've caught a dozen bluegills right alongside a stationary boat but when Wimpy Steerman guided me to an Ocala National Forest pond where he said the bluegills were big and plentiful things worked out differently. We caught them on fly rods with little popping bugs and as long as we made long casts and no noise it was easy. Once you passed a hotspot it was through for the day. The water was shallow and the fish hadn't seen many boats.

Not too many fishing rigs are built for gouging back into the swamp. If bigger boats have helped the fisherman it's by keeping joy riders and water skiers to open water.

Not every cove is full of fish but there are indications of the ones that are. Mouths of small creeks, even when they seem completely choked by hyacinths or other growth, are prime fishing spots. When the water level is falling you have something else going for you as bait is likely to be coming down.

Lots of fishing is passed up because of shallow water. If there's a deeper area nearby, gamefish will go out where the water barely covers their fins. Many productive shoreline casters are throwing their lures in less than a foot of water, especially in early morning and late evening.

Cartop boats mounted on 4-wheel-drive have made things tough on a lot of back country fish and the airboat will find spots you won't get to with a boat or on foot—but not everyone keeps an airboat or swamp buggy in his garage. Those who have them won't need much help from me.

Canoes catch lots of fish in the back country and I suspect a canoe is about as much a frame of mind as it is a slick fishing boat. It's natural to go softly when you're in one. I've had some fine canoe and mini-boat trips when the little craft was carried piggyback on a fast-moving power boat and then relaunched at the mouth of a small creek or toted back into the boondocks by hand. For years we enjoyed a private fish preserve down in the Everglades because everyone was using 30-mile-an-hour boats that didn't fit the little creek you had to navigate. It was a lot of trouble loading the pee-wee boat but the creek was a real ace-in-the-hole until some wisenheimer got free with an axe and saw.

That one wasn't a bass creek but was full of 15-pound tarpon, apparently the year around. When you nosed in there with a big boat you'd hit submerged brush and could see the surface shiver for 30 yards up the creek. The tarpon would start rolling ahead of you and the farther you scratched along the bigger your herd would get. Finally, after a mile of cussing and trying to put a plug on one



you'd find them scooting back under the boat and you'd be left up there with nothing but a few bubbles on the surface.

Then we started loading a little pram on the big boat and climbing into it when we reached the creek. One guy would paddle and the other would fish. We'd sneak along like rabbits in a beagle kennel and some of the strikes in that little overhung creek were wonders to behold. We didn't land many fish but we laughed until our ribs kinked. There was an occasional snook in addition to the tarpon.

One year some teal were living back in there and you know how a teal will fold his wings and dive through a hole in the brush when he *knows* there's nothing in there to be afraid of. Well, a teal never noticed the little, camouflaged boat and landed on the water about a foot from me as I sat in the bow. If you think a duck lacks facial expression you should have seen his countenance when he sighted us. He jumped right back through the same hole and I'll bet he didn't get his feathers back in place for a week.

Some years back the best bass fishing I ever had was down in that mangrove country and you got to it by just going further up the rivers than the other fishermen. It was a drought following a long period of high water and the bass had dropped down in there from the sawgrass. I've actually seen them schooling where you'd expect only salt water fish.

Anybody who fishes back country puddles has to watch the rainfall record. We used to make frequent trips into some bonnet (lily pad) lakes in the Ocala Forest, using a small boat as a cartop, but a lot of

If bass fishing should be poor, the back country fisherman can work on panfish, left. This was just one of a stumpknocker regiment that sought out a tiny popping bug in a central Florida creek. Fifty yards from a rather heavily traveled channel, at right, this St. Johns River fisherman has a quiet pool all to himself.



them were ruined by prolonged dry weather and that's a hazard when you're spending time on small waters as it's discouraging to fish a pond that was dry the year before. Such fluctuations are part of Florida fishing and unless you stay with it you'll never keep track of the fish supply.

There are indications of course. Generally a backwoods lake with a good supply of bonnets has been full of water for some time and bonnets indicate considerable depth. A steeply-sloping shoreline generally means deep water. A wet-weather pocket without a clearly defined margin of shoreline vegetation probably isn't worth fooling with. Look for a beer can or two. Maybe somebody *knows* the place has good fishing.

What undermines my morale is that you might find a good pond on what was simply a bad fishing day so I keep going back thinking I just haven't found the fish in the mood.

Eddie Martin, a boy from next door, just came over to show me a 4-pound bass he caught from a pond on a main highway heavily traveled by boat-towing fishermen. The place he fished might as well be located in the depths of an impenetrable swamp for all the attention it gets. A lot of good fishing is like that. I know one successful bass angler who specializes on a small, swan-decorated pond in a city park. He'd go over there for an hour after work every evening and knows the bottom so well he could probably hit part of the fish with rocks. The other fishermen are occasional grade school kids. My friend does his best mainly with plastic worms.

Incidentally, plastic worms are especially effective in "prairie" ponds and creeks of South and

Central Florida. Most of them have few impediments on the bottom and the worms can be worked the way they're supposed to be. On a trip near Lake Okeechobee last year I watched Ray Stephens and John Wilhelm catch bass from such an open creek, using worms on spinning rods, while I couldn't get anything but gars on surface lures. Some of my Ocala Forest pools are too full of bonnets for effective worm wiggling unless you rig it fishless as well as weedless. These forest ponds can seldom be fished from the bank but the open creek of cattle country are something else again.

The bank fishermen with the most fish generally have a little route of ponds and driblets. They eliminate spots that have repeatedly proved fruitless and are constantly adding others. They show you a big string of fish they "just happened onto" but in my experience you cast into a lot of puddles before you find a producer. No boat at all is best in open, clear ponds if you can work from the bank.

Bank fishermen generally need pretty husky tackle if they aren't to lose a lot of lures because they can't row over and loosen a snagged one. Lots of canal walkers spend considerable money for plugs.

There are a lot of bass and some salt water fish in a highway canal I've followed in South Florida. I knew a fellow who used to troll that ditch every Monday at low tide and collect the snagged lures from the side away from the road as a sideline. Sometimes he'd get as many as 20 baits on a trip and at a buck-and-a-half each it was pretty fair collecting. He was a well-heeled retired surgeon

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A little boat on a small stream will get you lots of fish, but you have to use some stealth. Those fish not used to traffic can be quickly spooked.

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and did it just for fun. The heavy “knockers” that free baits when you can get above them wouldn’t help in that situation.

Canals are so easily reached they’re often ignored. Even some of the newer ones are likely to have plenty of small fish. A little surface vegetation is a nuisance for casting but helps hide you from the targets. I’ve had a rough time on wide open, clear canals. There’s a new one north of Everglades that requires all the stealth needed for a brown trout stream. After slipping along the edge and breathlessly flipping a small lure or fly into it you can watch the bass and burly bream swim away in frustrating boredom. Occasionally, with a long cast and a sneaky approach I hook a small fish but I’ll bet a boat on that one would put you out of business quick.

A first class psychologist would have an advantage in fishing roadside ditches. Fishermen gather at certain landmarks, probably because they’re just naturally gregarious. I used to note that on one lonely South Florida highway the fishermen would congregate just in sight of a water tower. I figure that they’d drive along the road looking for a place to fish and stop at the first sign of civilization. The place they all fished was no better than the rest of the canal and a lot more crowded but there were more convenient parking places as the grass was beaten down from water tower sighters stopping there down through the years.

Buzzing along one road south of Sebring I stopped to check my boat and trailer in a drizzling rain. Something swirled in the roadside ditch and I took time to string up a fly rod and throw a bug in there. A 2-pound bass jumped on it like money from home and stomped all over the place before I landed him. A second cast into the “virgin” pool

brought a smaller fish and about the third or fourth try I got hold of a mudfish (grindle or bowfin) that ate my bug. By then things were too stirred up.

These fish hadn’t been bothered because there was no particular reason for stopping at that particular place unless your boat trailer started rattling. I’ve driven past it since and can’t even remember where it was but those fish were short on the facts of life. If there had been a big tree, a wide place in the road or even a highway sign there would have been an excuse for other fishermen to stop.

Some of the most successful fishermen are simply out of step with the crowd and stay that way. I snickered last winter at a bass fisherman who kept right on casting the shoreline alongside a flotilla of trolling shad fishermen. I counted 16 boats within 300 yards of that fellow but he caught a bass while I was watching. Apparently he reasoned no one else would be silly enough to fish for bass in a shad traffic pattern.

A good map is Number One weapon for anyone seeking new, undisturbed places to fish. It not only enables you to locate the fishing spots but may help you to get there by the shortest route. The old story about the guy who fights his way for miles to virgin fishing territory only to find they’ve built a super-highway past it from the other side has been true more than once. I’ve been in his wet sneakers myself.

And another thing:

Try the back country spots when fishing is good elsewhere. Too many times no one ventures forth for new waters when fishing satisfies in the old ones. If fishing is poor elsewhere chances are it won’t exactly boom anywhere and that’s a poor time to locate new places.

Maybe a change of scene will do you good. ●

The Drilling

MUZZLE FLASHES

A view of the business end of a drilling will reveal usual twin shotgun barrels—above that of a rifle

By EDMUND McLAURIN



SOONER OR LATER every hunter encounters a game killing chance afield that demands a shotgun if he is carrying a rifle, or a rifle if his weapon of the moment happens to be a smoothbore.

Especially is this true of deer hunters. When carrying only a shotgun loaded with buckshot, it is not uncommon for a deer hunter to have a chance at a buck out of effective shotgun range. In similar fashion, the rifleman-hunter is hopelessly out of action if he should stumble on a feeding area of numerous coveys of quail or other promising wing shooting, of simultaneous legal season.

What is needed is a drilling—a European three barrel sporting weapon featuring two side-by-side shotgun barrels with a single rifle barrel centrally located underneath. All barrels are single shots, with direct chamber loading being done manually through a break-open shotgun type breech. Sometimes the three barrel drilling will have the rifle barrel located in the center rib, above, instead of below, the two shotgun barrels. Models of this style are correctly known as *schienendrillings*, a German term.

The shotgun barrels are usually either 16 or 12 gauge boring, but the rifle barrel will apt be one of any number of popular European calibers (designated in millimeter size, according to the European metric system). Chamberings for 9.3x74R, 8x72, 8x57, 7x57, 9.3x72, 6.5x57R and 7x65R are common among older models. Later models add to the variety of available calibers.

Occasionally a drilling is seen with the rifle portion chambered for a standard American caliber, like the .270 Winchester, .243 Winchester, .220 Swift, .308 or .22 long rifle, and so stamped. Likewise, sometimes the shotgun barrels are of 20 gauge boring instead of 16 or 12.

By now, you probably have more than passing interest in acquiring a drilling. . . . Don't bother to look for drillings in the current catalogs of American manufacturers; they don't make them commercially in this country.

The best of the drillings have come from the

shops of German and Austrian custom gunsmiths catering to the weapon whims of wealthy sportsmen and nobility. Wherever found, any weapon in original form stamped with maker name of J. P. Sauer, Richard Mahrholdt, W. Konig or Kuchebreuter can usually be considered high quality.

Most drillings feature snap up type of open rear sight, for use with the all-purpose bead front sight, for rifle barrel aim. Provision is usually made for mounting of optional choice telescopic sight.

In Europe, a claw type of scope mount is widely used—frequently with a Hensoldt glass, a scope sight of quality among European rifle scopes. Mounting is commonly high and central overbore. The high sighting plane may require addition of a lace-on comb-height pad to comb of stock for some users to correctly bring aiming eye in quick alignment with the scope's high line of sight and to properly support the face. For some users the custom stock comb may give correct face fit, and the usual integral cheek-piece prove adequate.

One nice feature about most drillings is the covered cartridge well recessed in the heel of gunstock to hold a reserve of several cartridges for the rifle barrel. These hand-made wells come with a hinged cover that snaps open and shut. Most are highly ornamented by their makers.

But drillings as sporting firearms have their bad points, too!

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Drillings make ideal deer hunting guns with their two barrels of buckshot load for close shots plus a rifle bullet for the targets beyond effective shotgun range.

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For maximum accuracy in relation to axis of barrels, the combination gun of twin shotgun barrels and single rifle barrel must not only have proper alignment in assembly by the custom gun-maker, but must also be rigid enough in design to maintain alignment under stress of firing. The result in a three barrel gun is pronounced total weight. Even with 24 inch barrels, a drilling is apt to be as heavy as an old time, double barrel duck gun, and just as slow to put to shoulder, align and swing if used only a few times each year.

Another disadvantage of a drilling is the limitation to a single shot from each barrel without having to break open the action and reload. There is no sustained firepower, as with a multiple-firing pump-action repeater or an autoloader. It is true that the twin shotgun tubes do give the shooter the equivalent firepower of a conventional double barrel shotgun, but the rifle barrel is still single shot.

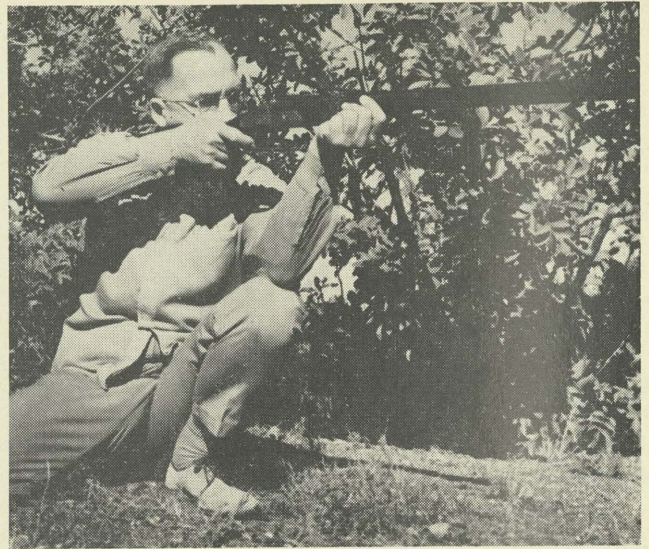
Delivered on this side of the Atlantic by Stoeger Arms Corporation and a few other nationally known importers of top quality foreign arms manufactures, a new drilling will invariably have a starting price somewhere around \$600. The fancier jobs carry price tags two or three hundred dollars higher. Over-the-counter sales are almost solely in sporting goods emporiums of Abercrombie & Fitch category.

Drillings are expensive because they represent hand-crafted custom work and are complex of mechanism. In the case of the German and Austrian products, the firearms also frequently come highly ornamented, with receivers and barrels—even screw heads—showing many hours of painstaking hand engraving. Gold and silver inlays often add to the cost of finished jobs, as do buffalo horn, hand-carved trigger guards and subsequent customs' duties that have to be included in the delivered price.

Most of the available ready-mades also initially left their makers housed in custom-made leather, velvet lined cases of tailored gun fit and of the finest materials.

Fortunately, many second-hand drillings in excellent condition are now in this country and available for purchase from private owners at considerably lesser prices—largely as a result of World War II occupancy seizures of German and Austrian civilian owned sporting weapons and their subsequent purloining as "war souvenirs" by returning GI's. An ad in the classified columns of *THE SHOTGUN NEWS* (Columbus, Nebraska), gun trading organ of shooters the world over, will surely locate one of the combination guns if home state area proves fruitless.

Combination guns have been used since black powder days, and there are many still in existence



In field use, a drilling feels and handles much like an old time, double barrel duck gun. To use one with speed and accuracy requires practice.

that are of hammer style and made with Damascus steel (welded spirals of steel and iron) shotgun barrels. The same care, therefore, must be exercised in purchasing a second-hand drilling as with any yesteryear double barrel shotgun. The shotgun barrels of a drilling must also be capable of safely handling modern smokeless powder shotshells. Unless maker-stamped to indicate nitro-proofed steel, have the safe shooting qualities of the barrels verified by a gunsmith. It is never wise to take a chance on possible gun blowup and personal injury from using modern smokeless powder loads in *any* firearm made to black powder safety tolerances!

Seemingly, there are more second-hand drillings with 16 gauge barrels in combination with a big game caliber than models incorporating 12 gauge size barrels. However, 12 gauge models can be had. The firm of J. P. Sauer turned out many drillings with 12 gauge barrels, both as custom-made guns and as war-order hunting weapons for ranking personnel of the *Luftwaffe*. The last named models were frequently made with the rifle barrel chambered to handle the 9.3x74R rimmed, bottleneck cartridge. The load utilizes a 285 grain round-nose, soft-point bullet that gives a muzzle velocity of around 2300 feet per second and muzzle energy of some 3,340 foot-pounds. Various American importers can supply packaged ammunition made to these ballistics.

Some of the European rifle chamberings compare favorably with popular American calibers in ballistic performance. The 9.3x72, a common European chambering, closely duplicates the performance of our .35 Remington caliber. The venerable 6x57 Mouser practically echoes our .244 (6mm) Remington cartridge, and the 7x64 is only a shade different from our .280 Remington caliber. The

foreign 7.62x63 is merely the European nomenclature for our .30-06; ballistics are the same.

Ammunition of foreign, metric size designation can be had through Norma Precision, Inc., South Lansing, New York, importers of Swedish Olympic grade sporting ammunition.

What few foreign size cartridges that Norma does not list can usually be found among the RWS and DWM cartridge imports, distributed in this country by Stoeger Arms Corporation, South Hackensack, New Jersey, and DWM, Lewiston, Idaho.

Both Remington and Winchester make ammunition for such foreign sizes as 6mm, 7mm Mauser, 8mm Mauser and 7.62x63 (.30-06). Federal manufactures 7mm Mauser and 8mm Mauser sizes in high shock hunting load.

In most instances, you won't have to shop around very long to find the proper cartridge for any drilling chambered for a caliber generally known among shooters. Also, a good gunsmith can sometimes modify the rifle chamber of a drilling to accept and safely handle a closely matching, but more readily available cartridge.

As might be expected, by now some of these World War II souvenirs have suffered the ravages of time and neglect. But even when renovation by a good gunsmith is needed, many second-hand drillings are still good buys.

Superficial checks of present condition can be made by testing for smooth, positive operation of safeties and trigger pulls and closely inspecting the condition of illuminated barrel interiors. Existing looseness of assembled component halves can be determined by grasping the barrel portion in one hand and the stock section with the other, and then giving a sudden, opposing twist. Any looseness can usually be felt.

Many second-hand drillings were fancy, custom-engraved jobs in their heyday. After accumulated dirt and oxidized metal film have been removed, the metal portions most likely will again reflect their original artistry and beauty. Hagerty silver polish (obtainable from your jeweler) and an old tooth brush will work wonders in bringing back the beauty of silver and gold inlays and finely executed scrollwork.

It is not recommended that the average shooter attempt to dissamble a drilling for internal cleaning or repair. Both professional knowledge and tools are needed. Many of the screws used in these custom-made guns are relatively soft and often of unAmerican thread; it is easy to break them off if the wrong size screwdriver or wrong direction force is applied.

As any gunsmith of experience can tell you, dismantling a drilling and repairing or adjusting its components is not in the same category as most firearm refurbishing. A drilling is sensitive

to almost imperceptible pressure changes on hand-made parts fitted to close tolerance. Usually a gunsmith does not really know what to expect in the way of internal condition until, like a doctor, he opens up the "patient" for a look-see. This explains why few gunsmiths accept drilling overhaul jobs with obvious delight.

Another good reason for professional gunsmith inspection is assurance that chamber dimensions and ammunition match. In numerous cases, original chambers have been altered by subsequent owners to handle some ammunition substitution, but without altering the original markings or otherwise denoting a change from original chamber dimensions. Firing the wrong ammunition in a drilling—or any firearm—can be dangerous procedure!

Around the turn of the Century, the now expired Three Barrel Gun Company, of Moundsville, West Virginia, manufactured the American equivalent of a European drilling. So did Lefever Arms Company, of Ithaca, New York, for a number of years. But American production of drillings never caught the fancy of big names like Winchester and Remington. Sportsmen have had to depend on imports.

Today, only Savage Arms makes an inexpensive two barrel version of the popular European type combination gun—the Model 24 Savage, which can be had with choice of .22 caliber rifle barrel over a barrel of 20 gauge or .410 gauge, or a .22 Magnum rifle barrel over the same choice 20 or .410 gauge shotgun barrel, plus choice of .222 Remington varmint cartridge over 20 gauge shotgun barrel.

Actually, the Savage Model 24 is not a drilling, since it is only of two barrel design; correctly, it should be called a simple type combination gun. It is, however, a sporting weapon of versatile application, one well balanced and accurate. For the shooter who cannot afford a true drilling, the Savage Model 24 is a fairly practical compromise.

The advice "Know your gun" holds added emphasis for the American sportsman who chooses a European drilling for hunting, rather than merely a collector's item. He must be thoroughly familiar with instant selection and operation of individual barrels, their safety locks and releases, and the correct trigger to activate for a fast shot with barrel of choice. Otherwise, he is sure to miss chances afield, as unfamiliarity is conducive to time-consuming fumbling, if not complete failure to get off a shot.

Fortunately, in the months ahead, you have plenty of time to acquire a good drilling and get used to it in preparation for next hunting season. ●



Dummitt Castle — Another Page From Florida History

Royal Relic of Merritt Island

By JOHN FIX

MOTORISTS BOUND FOR the space center at Cape Kennedy, who turn east off U.S. Highway No. 1, at Titusville, Florida, tremble with excitement as they strain for a first glimpse of the towering vehicles of space waiting patiently on their pads for the impulse that will send them hurtling into the stratosphere and beyond.

But before they can get the family jalopy fairly past second speed forward, there looms to the left on the causeway a startling apparition: A dilapidated wood structure, three stories in height, octagonal in shape; an architectural monstrosity likely to render the most carefully contrived Haunt of Evil for a class-B horror movie childish by comparison.

The startled motorist squeals to a stop. More often than not he makes the religious sign calculated to ward off evil. He alights from his car. Behind him troop his puzzled passengers. Slowly they all traverse three sides of a 10-foot-tall chain fence surrounding the ancient pile. What in the world is it? There is no one about, whom they might question. What's it doing out here? Why the heck doesn't someone put up a sign?

Obviously, the king-size hovel with its twin gables front and rear, its missing windows and frames, its sagging doors—where indeed any exist!—has been transported from another locale. New cement blocks support the sagging corners of the old building. The area surrounding it is devoid of vegetation. Angry waves of the broad Indian River nip at its emaciated flanks.

Generally the visitor departs without ever learning that he has stood in the presence of royalty; that the dilapidated dwelling is none other than famed Dummitt Castle, once the home of the Duke and Duchess of Castellucia, built in the 1880's and destined for restoration to its former splendor and

for use as a Brevard County museum at some undetermined future date.

The history of Dummitt Castle which had indeed occupied an earlier site, on nearby Merritt Island in the heart of NASA's space complex, is intimately associated with the history of the Indian River orange, pride and glory and source of the comfortable wealth of the lush Indian River region.

The story begins in 1807 on the island of Barbados where Colonel Thomas Dummitt, a wealthy sugar planter, loaded his slaves and his family aboard three cargo vessels and fled to the mainland to escape the proclamation of the Abolition Act of 1807, which would have freed the slaves. Youngest member of the family was Douglas Dummitt who had been born the year before.

When Douglas was 13, the Dummitts moved to New Haven, Connecticut. There they remained for six years. Then in 1825 Thomas Dummitt took over a large plantation in the Halifax River country of Florida. But young Douglas was more interested in oranges than sugar cane. So in 1830 he selected a site and planted the grove that bears his name and which was destined to be renowned for the longevity of its trees. From the trees of that grove were budded every one of the Indian River oranges, famous throughout the world today for their size, color and flavor.

Douglas Dummitt's grove was one of surpassing beauty, seven acres set upon a narrow strip of high, very rich soil on Merritt Island, between the Indian River and the Lagoon with only a narrow dune between it and the Atlantic Ocean. First, Douglas planted wild sour-orange trees, 20 feet apart. Then he budded them from fine sweet-orange trees he had stumbled upon in the old Jones' Grove near New Smyrna, a grove believed

to have been planted by the Minorcans of the Andrew Turnbull Colony in the 1760's. Dummitt set his bud unions three feet above the ground, a fact that permitted them to survive the great freeze of 1835, a calamity that wiped out all other orange groves in Florida. Orange culture in Florida was re-established from Douglas Dummitt's trees.

Soon Douglas was shipping large quantities of oranges commercially. A copper-prowed canoe, the Carolina, hollowed out of a single cypress log by Dummitt and a Minorcan sailor named Captain Burnham, carried 500 barrels of oranges each trip. The canoe which was 29 feet long, four feet wide and 28 inches deep was poled by two slaves to the schooner of the elder Dummitt anchored in the harbor at New Smyrna. The copper-prowed canoe is on exhibit today in the Florida State Museum at Gainesville.

Adjacent to the grove Dummitt built a mansion constructed of heavy hewn oak logs. This structure remained standing for more than 100 years. Its wide, coquina-rock chimney is still visible on the property.

While Dummitt Grove escaped destruction in the Great Freeze, it ran into a new and quite as serious threat: The Seminole Indian War. Alarmed Indian River region residents hastily formed a militia and chose Douglas Dummitt as its captain. Off went Captain Dummitt to fight Redskins, at the head of a legion known as the "Mosquito Roarers." He was wounded in the neck and a long convalescence obliged him to abandon his grove in the late 1830's and through the 1840's. At length he recovered and began cultivating oranges again.

By 1869 Dummitt Grove was the largest in the state, with 1350 trees producing 700,000 oranges a year. These oranges were meticulously prepared for shipment to eastern markets. Each orange was carefully wiped by hand after being picked, and the fruit was packed in barrels between layers of Spanish moss.

Douglas Dummitt died in 1873. Dummitt Grove was bought by George W. Schyler of New York City. He in turn sold it, in 1878, to Nicole Tamajo, Duke of Castellucia—a ducal title of rather doubtful legitimacy—for \$30,000.

The Duke was a man of means, having married an American heiress, daughter of the then-head of Anheuser-Busch of St. Louis. And, phoney Duke or not, Nicole exhibited a talent for agriculture. He expanded the Grove to 30 acres and took painstaking care of his trees. And he began the construction of the Castle, the ancient relic that so startles space-bound motorists crossing the Titusville Causeway.

In its day it was known variously as "Dummitt Castle, the "Villa Castellucia" and the "Duke's Hunting Lodge." It was designed by a famous New York architect, J. J. Coward and its octagonal

shape and the octagonal shape of most of its rooms was Coward's idea. He believed the odd shape would better resist gales and the hurricane winds that occasionally plagued the area. Coward even narrowed the gables of the house to a startling degree in order to better resist wind.

The Castle is constructed of 30-foot boards, rafted down the Halifax River and the Lagoon from a ship wrecked off Jacksonville. The first floor reception room of the residence, and the billiard room directly above it, are the only rectangular rooms in the building. On either side of the reception room and ascending three stories, are circular staircases wound around the stout masts of the same wrecked vessel that supplied the timbers of the house.

In addition to the Castle, the Duke built two fruit packing houses and twin boat houses with spacious wharves. He also dredged a private channel from the Indian River to his bulkheaded grounds.

But a cloud was hovering over Eden. All was not sweetness and light, magnolias and orange blossoms within the Ducal estate. Domestic discord reared its ugly head. The Duke was observed to spend more and more time away from the Castle, hunting and fishing. The Duchess entertained more and more lavishly during his absences. Finally the royal pair reached a single note of accord. They agreed to the construction of a partition through the center of the Castle. Thenceforth, the Duke occupied one apartment, the Duchess the other. It is rumored they never spoke to each other again. Eventually the Castellucias disappeared from the Indian River country and Dummitt Grove and the Castle came into possession of humbler and less temperamental souls.

Tenantless Dummitt Castle fell into disrepair and was put to a variety of menial uses, ranging from storehouse for fertilizer to sleeping quarters for migrant fruit pickers. It finally reached such a state of imminent dissolution that its alarmed owners considered sawing it up for firewood.

Then the Brevard County Historical Society stepped forward and offered to remove the historic wreck and implant it on a site, provided by the City of Titusville, along the Causeway. Eventually, as we explained, it will be restored and will serve as a historical museum.

Brevard County is justly proud of its importance in the Age of Space. And there are many Brevardians who will argue that a ramshackle house which appears to be the haunt of ghosts and goblins has little in common with missiles and space vehicles.

But there are others who will point out that there is perhaps a greater affinity than we are aware. After all, has each not business in another world? ●

CONSERVATION SCENE

(Continued from page 4)

rector of the Florida Audubon Society, the oldest conservation organization in Florida, with 7,000 members. "A harmless and beautiful bird of prey, the Bald Eagle lives mainly on fish, plentiful in Florida waters. They do rob Ospreys of their fish catch, but in spite of this Eagles and Ospreys seem to get along amicably and have for many centuries. An old 'wives tale' that Bald Eagles are dangerous to livestock was exploded years ago when it was determined that the maximum load an eagle can carry is far below the weight of most young animals. The same applies to the fables sometimes quoted of eagles carrying off children. Such a story has never been proven."

Ranchers and foresters in Florida have joined in the Audubon campaign to protect Bald Eagles and their nests so far as possible. In the Kissimmee Valley alone, a million acres of ranchlands are registered with the Florida Audubon Society as Bald Eagle sanctuaries. In the rest of the State, another million and a quarter acres are similarly reserved.

Cub Scouts throughout the country have joined their parents and friends in the Eagle Campaign. They have been sending to the Florida Audubon Society package after package of used commemorative postage stamps. These stamps when sold provide funds with which to supply posting signs for the Eagle sanctuaries as well as research on the habits of the eagles, where they prefer to nest and how many young they produce. Florida and Alaska are now the only States producing young eagles in even fair numbers.

Adults have become members of the American Bald Eagle Club at a \$1 Fee to provide additional funds. Thousands of boys and girls from Maine to California representing the youth of Amer-

ica have become Eagle Guardians and thus pledge their efforts to protect America's National bird.

"There is a growing awareness of the interdependence of all living creatures, including eagles and man," says Irwin W. Fritz, structural engineer of Orlando and president of the Florida Audubon Society. "This should help to save the Bald Eagle for future generations. We do not want our grandchildren and their children to be familiar with America's National Bird only from pictures in their science books. We want the majesty of eagle flight still a part of our living landscape."

Gun Legislation News

A MAJOR SEGMENT of the nation's hunting and shooting industry has called upon the 90th Congress to continue efforts to pass effective and workable firearms legislation along the lines introduced in the last session by U. S. Sen. Roman L. Hruska of Nebraska.

Charles Dickey, director of the National Shooting Sports Foundation, expressed industry support for both a destructive devices bill to put heavy military ordnance under the National Firearms Act, and a Hruska-type measure to curb abuses in mail-order sales through amendments to the Federal Firearms Act.

The 102-member Foundation represents not only the major

manufacturers of sporting arms and ammunition, but also the manufacturers of shooting accessories, hunting clothes and publishers in the outdoor field.

"I feel confident that America's 25 million recreational shooters and the rest of the nation's 40 million firearms owners will join us in supporting this kind of realistic legislation," Dickey added.

"Sen. Hruska's approach to amending the Federal Firearms Act of 1938 would be effective in assisting the individual states in controlling sales of firearms, without infringing upon the rights of America's sportsmen," he said.

"The Hruska-type bill would make it unlawful for any licensed dealer or manufacturer to transport firearms in interstate commerce where it would be in contravention of state laws," Dickey explained. "It would also increase dealer and manufacturer license fees, and set minimum age limits and police notification procedures for certain purchases.

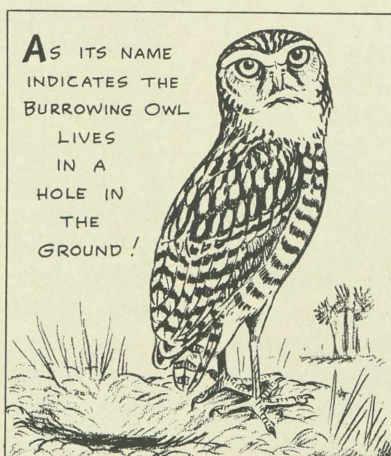
"These procedures would provide the framework for state and local authorities to restrict the shipment of firearms to juvenile delinquents, the mentally unbalanced, addicts and the criminally inclined."

Dickey said the Hruska-type destructive devices measure is "the kind of legislation we have actively sought for years to control heavy military armament."

"It puts complete control over mortars, bazookas, cannons and similar military left-overs where it belongs, under the National Firearms Act of 1934 which provides for registration and heavy transfer tax on each sale. This act now covers machine guns and sawed-off shotguns and is the logical Act to control heavy military weapons.

"Placing this ordnance under the provisions of the National Firearms Act would clarify the distinct difference between

Nature Notes



purely military armament, useless in any sporting sense, and those firearms commonly and properly used by this nation's sportsmen in their hunting and target shooting," he said.

"Placing these heavy weapons under this Act would also clear up a confusion exploited by the proponents of earlier, overly-restrictive bills. There has never been any justification for lumping together bazookas and skeet guns for legislative purposes. This has only served to mislead the public.

"Since no one has ever opposed control of heavy military weapons in the National Firearms Act, it is difficult to explain the delay in its passage," Dickey noted. "The nation's shooters and firearms owners, as well as manufacturers in the hunting and shooting field, regard such control over non-sporting armament as long overdue."

Conservation Yearbook

THE THIRD WAVE, a new and candid report to the Nation, describing the gradual but radical change in public attitudes about preserving the quality of our environment, was released March 5, 1967, by the Department of the Interior.

The latest in the Department's Conservation Yearbook series, the fully illustrated report carries a foreword by Secretary of the Interior Stewart L. Udall which declares the United States citizen is switching from his traditional role of conqueror to that of partner with nature. This trend, says Udall, will have a profound effect on the Nation's future.

THE THIRD WAVE borrows its title from the fact that America now is in a third great phase—an "ecological" one—in treating its natural surroundings.

This new conservation effort is geared "to repel the rising tide of environmental trouble," Udall writes in introducing the publication.



Photo By Hewey Clemmons

Wildlife Officers Carl Hawkins, left, and Earl Young, inspect fishing law violation evidence seized when they apprehended a Live Oak angler spear-gun fishing on the Santa Fe River, in Suwannee County. After a plea of guilty before County Judge Reece Brown, the violator received fines of \$25.00 for not having a fresh water fishing license, plus \$60.00 for the illegal taking of fresh water fish with a spear gun.

Foremost among these troubles is pollution, and with the recent shift of the Water Pollution Control Administration to the Department of the Interior, water is the dominant theme in this year's publication.

Udall bases his claim for a new and vital wave of conservation on the recent awakening of Americans to the abuse of natural resources. When they looked around, he comments, "they saw supine forests, exhausted rivers, sullen air, and they realized that to the victor belonged only the spoiled."

The new 128-page, full-color publication presents the role of the Department of the Interior, as it works to carry out the public mandate. Interior responsibilities involve almost every segment of the overall environment, making the "new conservation" ap-

proach a natural one for this Federal agency, which is often referred to as the Department of Natural Resources.

Full-color picture essays in the book include a look at the ways, good and bad, in which man shapes and impinges on his environment. A special 16-page section, "A Parade of Parks," pays tribute to the 50th Anniversary of the establishment of the National Park System—part of the Department of the Interior.

A two-page pictorial guide, "Which America Do You Choose?" provides an attention-holding educational tool for teaching resource management and its attendant pollution problems.

The publication has been placed on sale by the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402, for \$2.00.

EACH YEAR some hunters pay a tremendously high price in a seemingly uncontrollable urge to inflate their egos. They injure or kill other hunters they claim were mistaken for deer, bear and other game animals.

True, many hunting accidents are attributed to various other causes. Victims, unknown to the shooter, are out of sight, yet in the line of fire. Loaded guns are placed in cars, triggers snag on brush and shooters stumble and fall.

When hunting seasons close and statistics on accidents are compiled, however, one category seems to dominate all others. It's called, "Victim mistaken for game."

How or why any man can mistake another for a deer, a bear, a moose—even a pheasant—is difficult to comprehend. Let's give it a try.

What makes the acquisition of a big game trophy so important as to risk the life of another hunt-

er? Certainly not the value of the meat it will place on the table. Add up the cost of a hunting trip and you're way ahead of the game with a side of choice beef.

Part of the trouble lies in the desire of some hunters to acquire status among their fellow nimrods in bringing home a trophy. The man who gets his deer, for example, experiences a feeling of pleasure and pride. He is admired by the group and he continues to bask in this admiration when he returns home. His ego has been satisfied.

In some this desire for ego inflation is stronger than in others. Where some hunters look carefully to be certain of their target before shooting, others blaze away at a rustle in the brush, a strange sound or a vague movement. Their desire to acquire a status symbol is greater than their concern for the safety of another human being.

It is true that hunting is a relatively safe sport, that it ranks 16th

on the list of so-called dangerous sports, that more accidents occur in the home than while hunting. But this is not enough.

As long as hunters continue to die because they are mistaken for game there can be no false satisfaction in comparing statistics, no complacency in the false conclusion that hunting is a sport safer than most.

The solution lies with each individual, especially those who associate status with success and want it so fanatically that they fire first and look later.

Let every hunter assess his values and place them in their proper perspective. This means safety first, a trophy second. Identify your target before you shoot. No man even vaguely resembles a deer, bear or moose. Don't risk the price of ego inflation. The cost of guessing wrong is far too great for the dubious and short-lived recognition you will receive if your guess is right. ●

BIRDS OF PREY

(Continued from page 5)

could support, the total young would be 1500. A potential of 1500 young instead of 55—no wonder the Osprey and other birds are disappearing.

Further observations were: "Our present indications are that the Osprey population is very rapidly declining. Not only are the birds reproducing very poorly but few adults are actually present to reproduce. A total of 291 adults were seen in the Midwest during the summer of 1966. Because of the few adults seen there is a very poor probability that the Osprey population will be able to pull itself out of its decline, even if the birds can raise up to three young per nest."

The evidence continues to pile up regarding the adverse effects of poisons used with little or no control and no knowledge of the

long-time after effects. Laboratory tests on game birds have proven that certain poisons reduce productive capacity.

But branching off into the use of poisons in other fields: In 1957 Congress authorized the use of poisons to eradicate the fire ant in the South; which has since proven that even Congress with all its omnipotent wisdom can be misled. Records show that in some areas overdoses of poison to kill ants were devastating to wildlife. This program, however, started counter research and much protest which finally brought the broadcasting of poisons under some reasonable control.

Now in the East and Midwest the battle line is drawn on how and what to do with the Dutch elm disease. The poison manufacturers and their disciples have many pat answers and questions. One is "What do you want? Elms or robins?" So far the elms have

been dying, the disease spreading, and many robins also have been dying.

Even the U.S. Forest Service has discontinued the use of D.D.T. though its virtues are still echoed by other bureaus of the Department of Agriculture.

I recently heard a talk by a representative of a Chemical Company whose introductory remarks spelled doom to our free form of government by others of a different political philosophy if we didn't feed the world. The answer to raising and storing more food was the use of poisons. Certainly there is incalculable damage to stored grains by rodents and poisons intelligently used will suppress them. There is no argument on this. As for feeding the world, that is a subject I do not intend to enlarge on, but waving the flag to justify the use of all pesticides and poisons sours my stomach. ●

For that BIG ONE



that didn't get away

ELIGIBILITY REQUIREMENTS SPECIES

LARGEMOUTH BASS

.....8 pounds or larger

CHAIN PICKEREL

.....4 pounds or larger

BLUEGILL (BREAM)

.....1 1/2 pounds or larger

SHELLCRACKER

.....2 pounds or larger

BLACK CRAPPIE

.....2 pounds or larger

RED BREAST

.....1 pound or larger

All fish must be taken from the fresh waters of the state of Florida, as defined by the Game and Fresh Water Fish Commission. Fish must be caught on conventional fishing tackle, with artificial or live bait, in the presence of at least one witness.

The catch must be weighed and recorded at a fishing camp or tackle store within the state by the owner, manager, or an authorized agent of the respective establishment.

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The Editor, FLORIDA WILDLIFE

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Please send me the Florida Wildlife Fishing Citation with the inscribed data listed below:

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Address _____

City _____ State _____ Zip No. _____

Species _____ Weight _____ Length _____

Type of Tackle _____

Bait or Lure Used _____

Where Caught _____ in _____ County

Date Caught _____ Catch Witnessed By _____

Registered, Weighed By _____ At _____

Signature of Applicant _____

CUT OUT AND SAVE THIS APPLICATION BLANK



Brown Pelican

Wildlife Portrait By Lovett Williams

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